FINAL REPORT CONFIDENTIAL

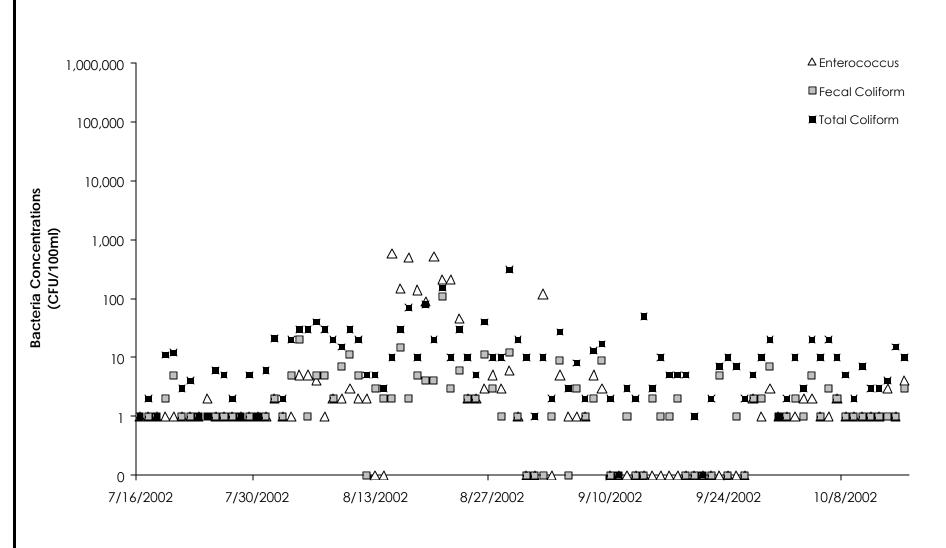
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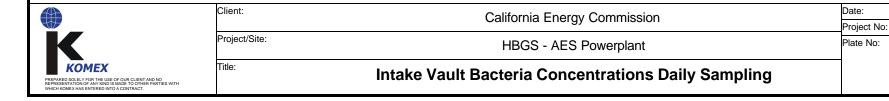
| 2-1 | Total Coliform Concentrations in the Discharge Vault, Summer of 2001 (MBC, 2002) |
|------|--|
| 2-2 | E. coli Concentrations in the Discharge Vault, Summer of 2001 (MBC, 2002) |
| 2-3 | Enterococcus Concentrations in the Discharge Vault, Summer of 2001 (MBC, 2002) |
| 2-4 | Bacterial Concentrations in the Intake Vault, Summer of 2001 (MBC, 2002) |
| 4-1a | Intake Vault Bacteria Concentrations Daily Sampling |
| 4-1b | Intake Vault Bacteria Concentrations Intensive Sampling |
| 4-2a | Discharge Vault-zero Feet Bacteria Concentrations Daily Sampling |
| 4-2b | Discharge Vault-zero Feet Bacteria Concentrations Intensive Sampling |
| 4-3a | Discharge Vault-ten Feet Bacteria Concentrations Daily Sampling |
| 4-3b | Discharge Vault-ten Feet Bacteria Concentrations Intensive Sampling |
| 4-4 | Discharge Vault-30 Feet Bacteria Concentrations Daily Sampling |
| 4-5a | Blackford Ditch Bacteria Concentrations Daily Sampling |
| 4-5b | Blackford Ditch Bacteria Concentrations Intensive Sampling |
| 4-6 | Boiler Fireside Wash Bacteria Concentrations Daily Sampling |
| 4-7 | Boiler Sump Wash Bacteria Concentrations Daily Sampling |
| 4-8 | Storm water Sump Bacteria Concentrations Daily Sampling |
| 4-9 | General Purpose Retention Basin Bacteria Concentrations Daily Sampling |
| 4-10 | Discharge Vault Laboratory Salinity Profile |
| 4-11 | Graphical Depiction of Error Boxes, Error Bars, Outliers, and Extremes |
| 4-12 | Box Plot Analyses of Total Coliform by Location |
| 4-13 | Box Plot Analyses of Fecal Coliform by Location |
| 4-14 | Box Plot Analyses of Enterococcus Coliform by Location |
| 4-15 | Box Plot Analyses of pH by Location |
| 4-16 | Box Plot Analyses of Dissolved Oxygen by Location |
| 4-17 | Box Plot Analyses of Field-Measured Salinity by Location |
| 4-18 | Box Plot Analyses of Temperature by Location |
| 4-19 | Box Plot Analyses of Turbidity by Location |
| 4-20 | Box Plot Analyses of Ammonia by Location |
| 4-21 | Box Plot Analyses of Conductivity by Location |

| 4-22 | blackford's Ditch Conductivity and Salinity Gradient |
|------|--|
| 4-23 | Time Series Plot of Sanitary Sewer Dye Test |
| 4-24 | Horizontal Temperature Surface Gradient at the AES HBGS Outfall and Cast Locations |
| 4-25 | Horizontal Salinity Surface Gradient at the AES HBGS Outfall and Cast Locations |
| 4-26 | CTD Cast Results-Temperature |
| 4-27 | CTD Cast Results-Salinity |
| 4-28 | CTD Cast Results-Dissolved Oxygen |
| 4-29 | CTD Cast Results-pH |
| 4-30 | Shoreline Rhodamine WT Concentrations between 6N and 15N |
| 4-31 | Temperature Time Series – Intake Mooring |
| 4-32 | Intake Vault Temperature, Salinity and Pressure Time Series – August |
| 4-33 | Salinity During the First Deployment and the Fraction of Salinity Depression |
| 5-1 | Predicted and Actual Ammonia Concentrations |
| 5-2 | Intake Vault and Intake Mooring Temperature Time Series |
| 5-3 | Intake Vault Temperature – Salinity Distribution August and September |
| 5-4 | Time Series of Temperature, Temperature Difference and Salinity for Intake and Outfall |
| | Moorings |
| 5-5 | Intake Vault and Intake Mooring- September |
| 5-6 | Histogram of Dye Concentrations greater then 0.15 ppb |
| 5-7 | Dye Dilution Histogram |
| 5-8 | Total coliform discharge exceedance modeling |
| 5-9 | Fecal coliform discharge exceedance modeling |
| 5-10 | Enterococcus discharge exceedance modeling |
| 5-11 | Total coliform percentage exceedance modeling |
| 5-12 | Fecal coliform percentage exceedance modeling |
| 5-13 | Enterococcus percentage exceedance modeling |
| 5-14 | Net flux of total coliform – predicted contribution to beach exceedance |
| 5-15 | Net flux of fecal coliform – predicted contribution to beach exceedance |
| 5-16 | Net flux of Enterococcus – predicted contribution to beach exceedance |
| A-1 | AES HBGS Facilities Schematic |
| A-2 | AES Outfall Terminus Detail |

- A-3 AES Intake Detail
- A-4 Mooring Array Figure

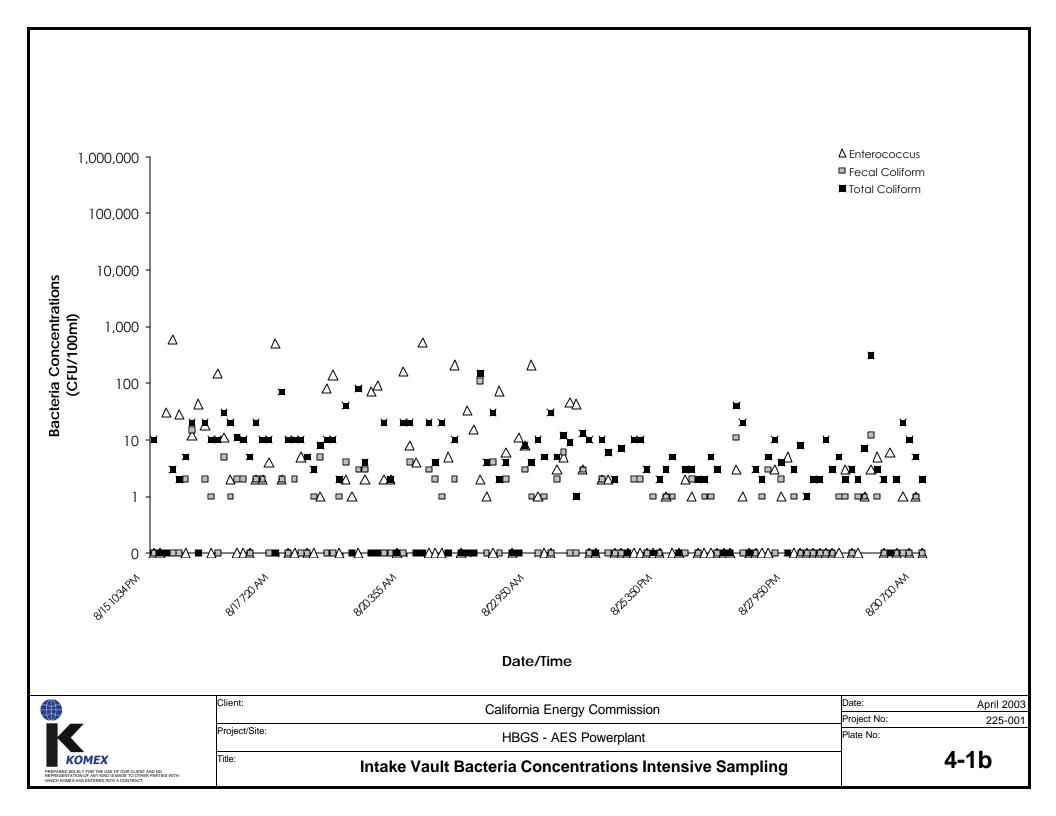


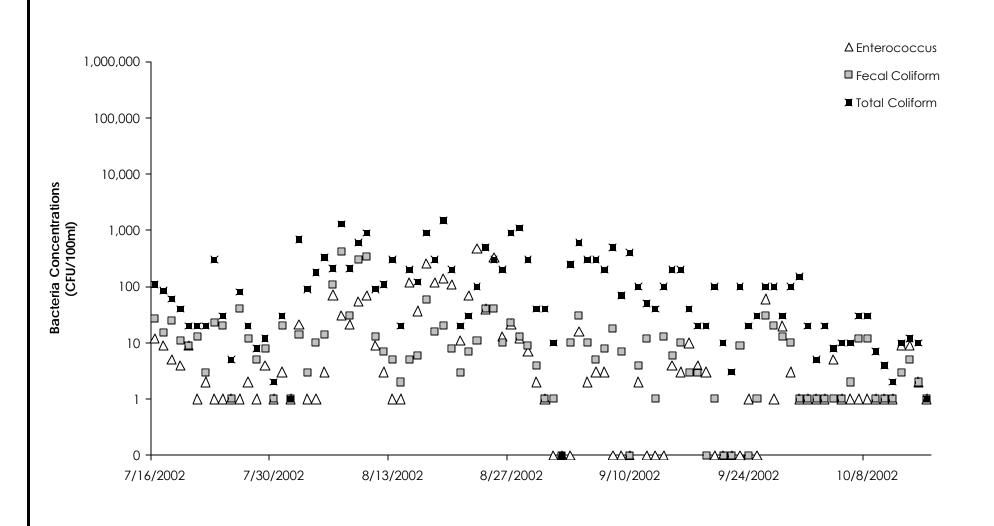
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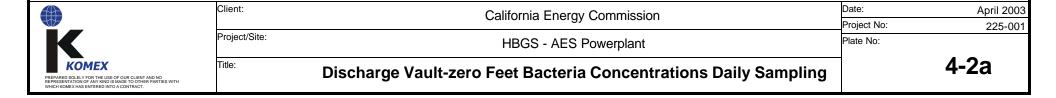
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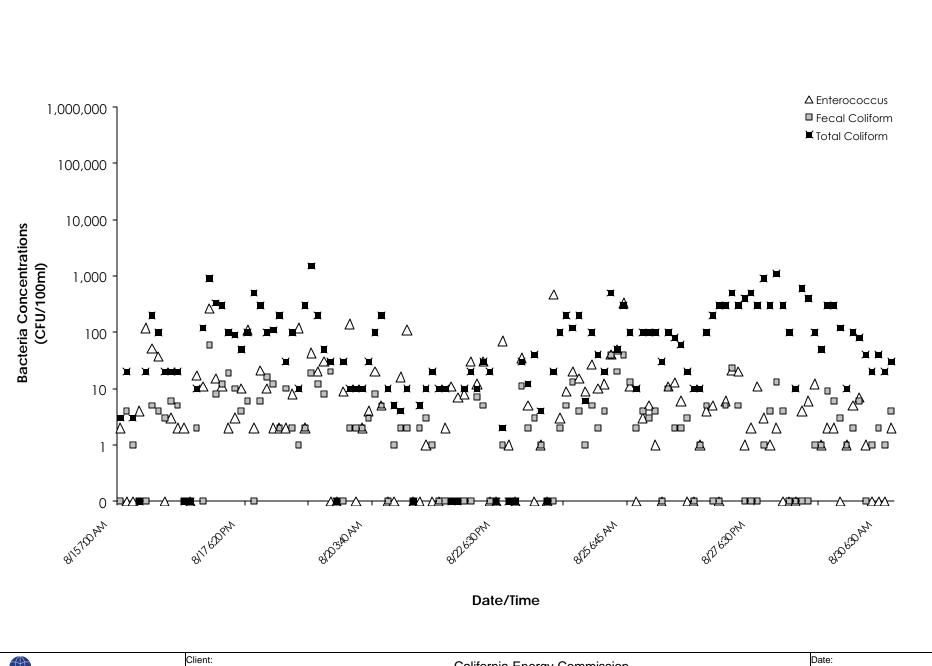
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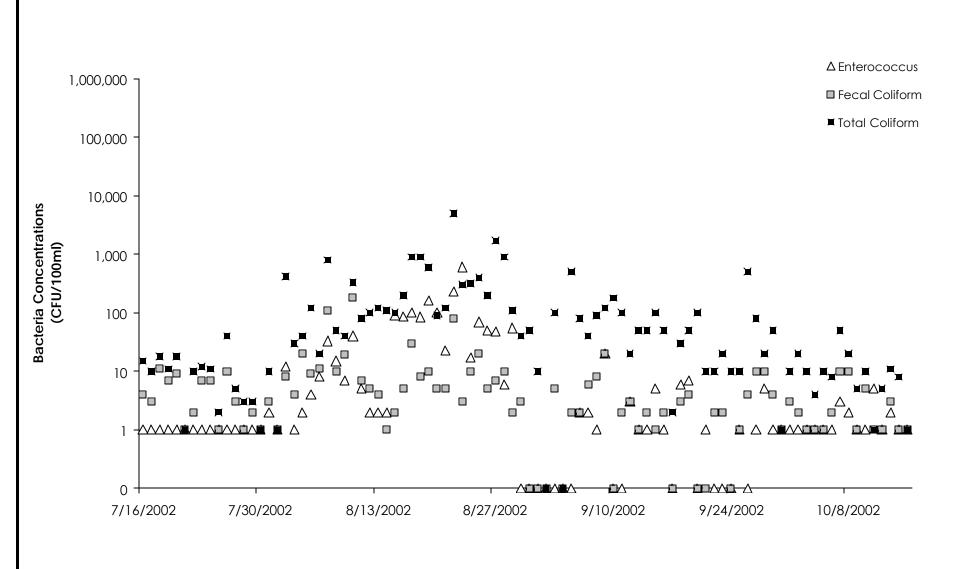
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Discharge Vault-zero Feet Bacteria Concentrations Intensive Sampling

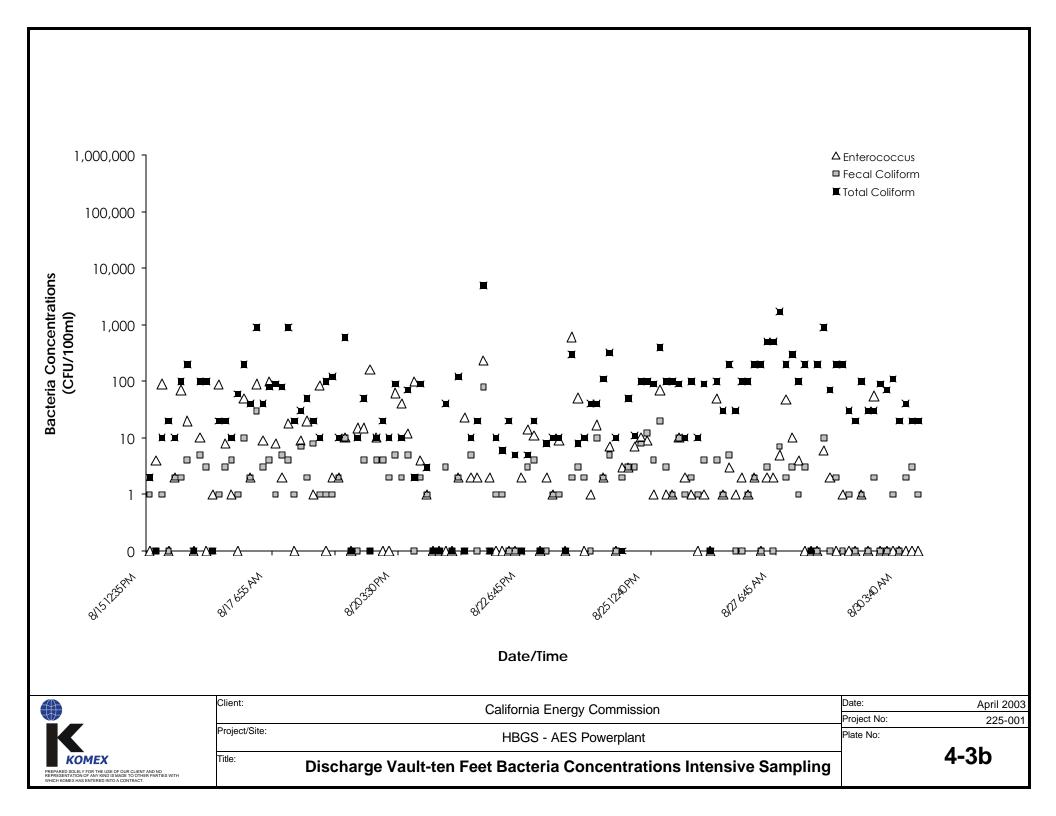
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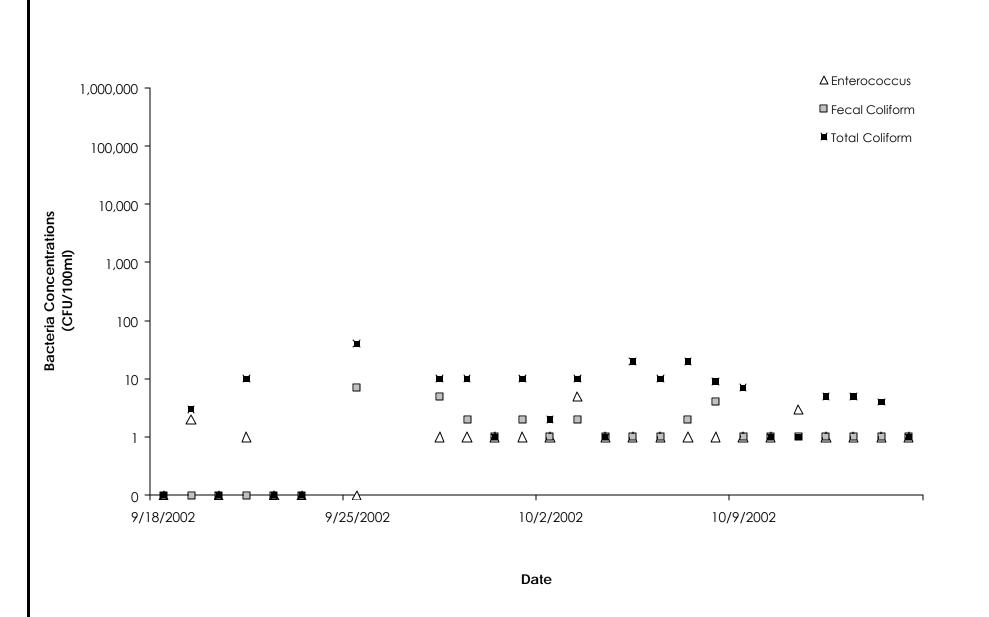
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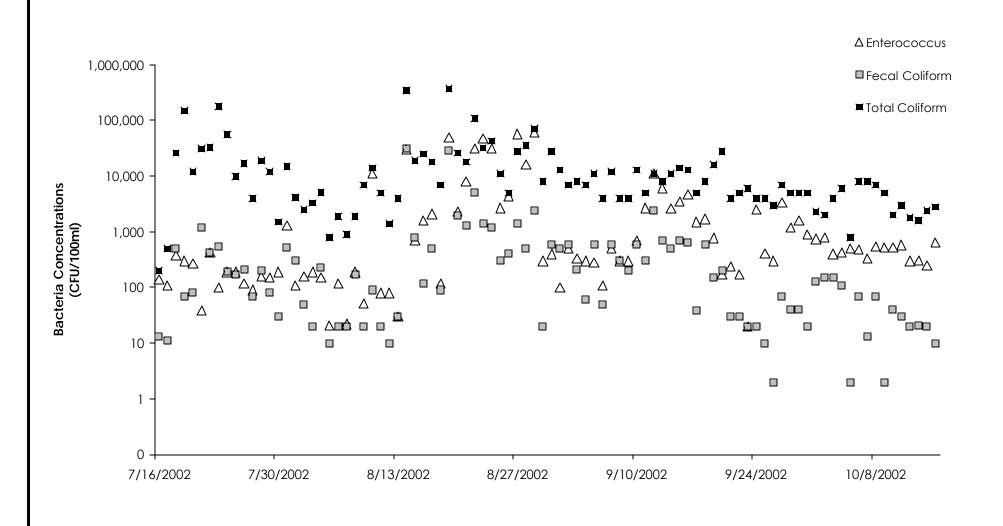




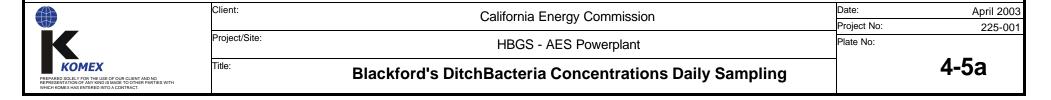
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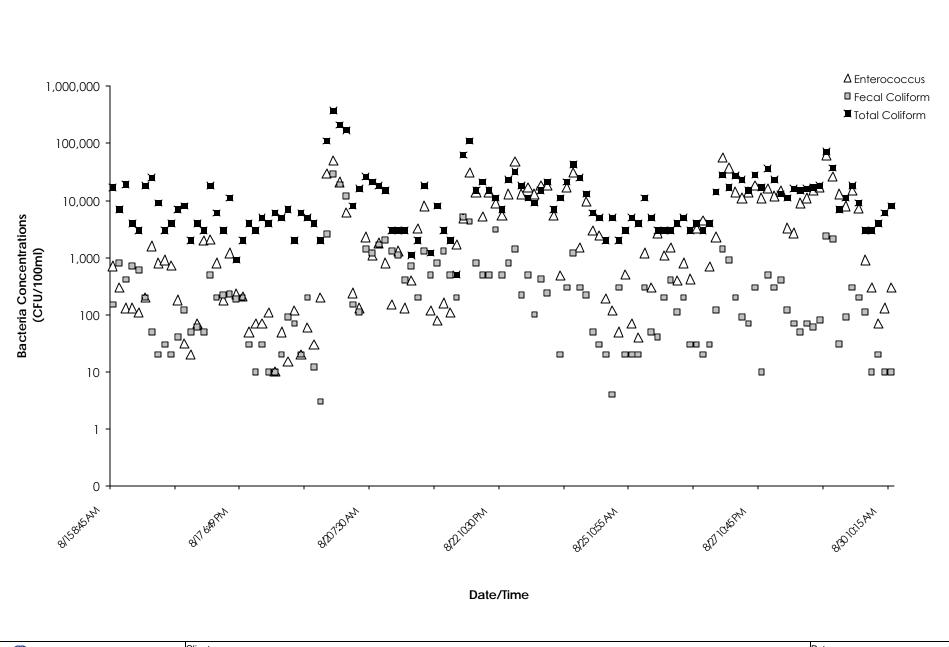
| Title: | Discharge Vault-30 Feet Bacteria Concentrations Daily Sampling | | 4-4 |
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| Client: | California Energy Commission | Date: | April |

April 2003 225-001

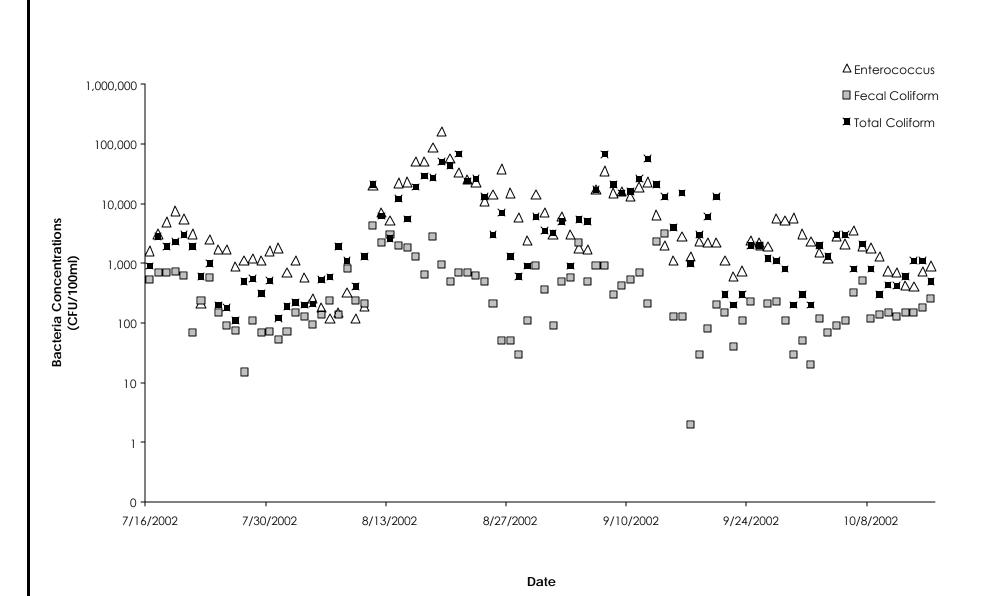


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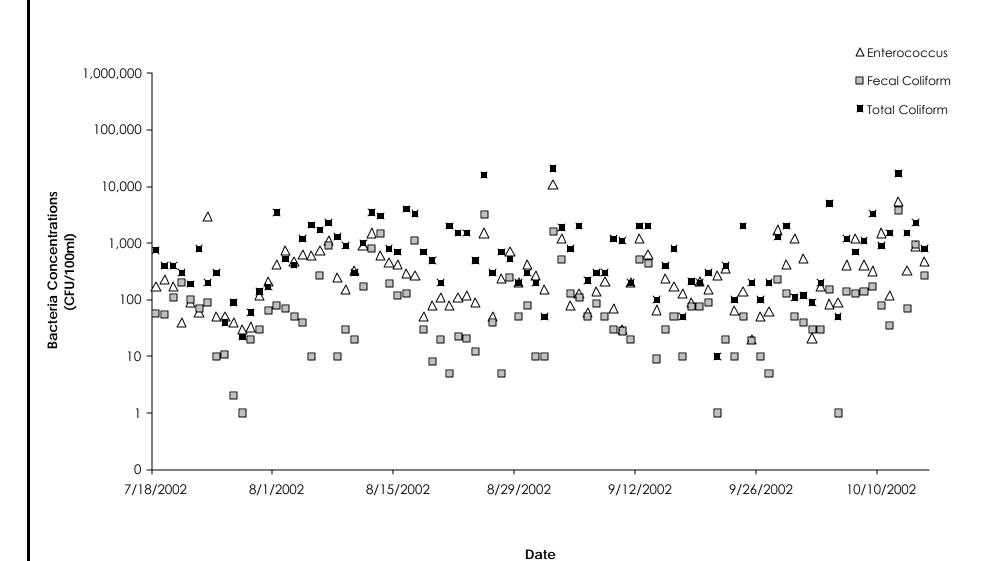




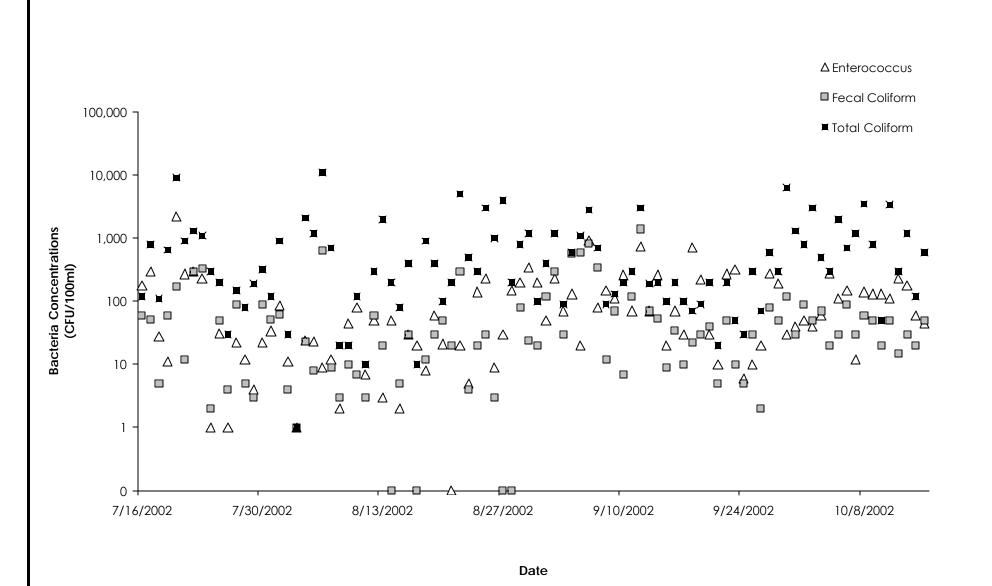
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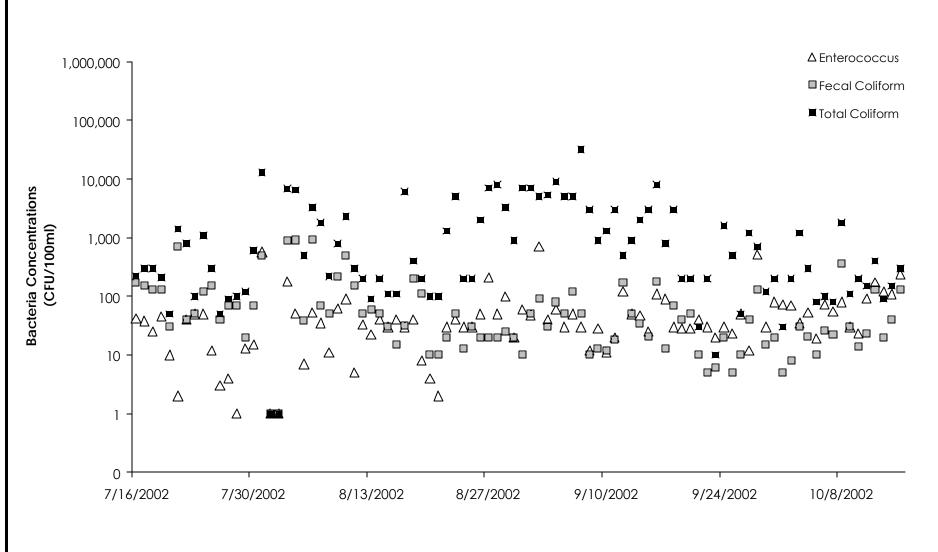


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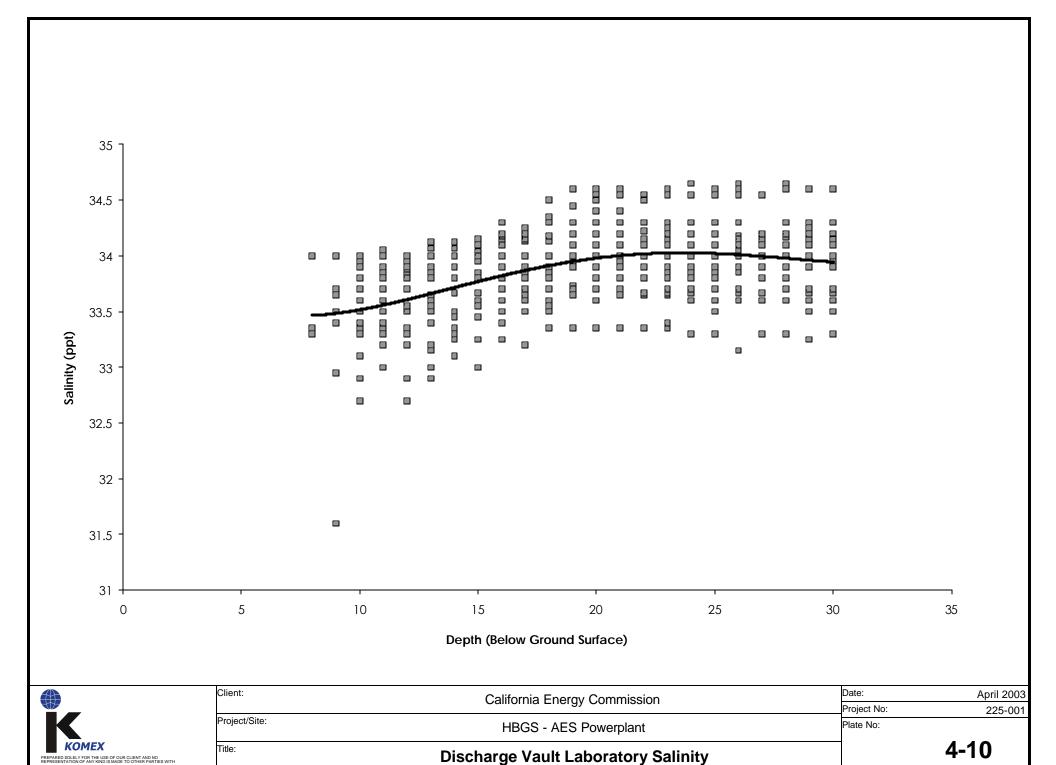
Storm Water Sump Bateria Concentrations Daily Sampling

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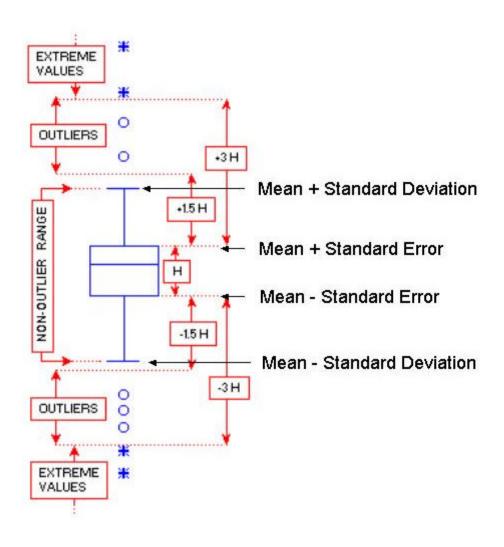


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| KOMEX | Title: | General Purpose Retention Basin Bacteria Concentrations Daily Sampling | | 4-9 |
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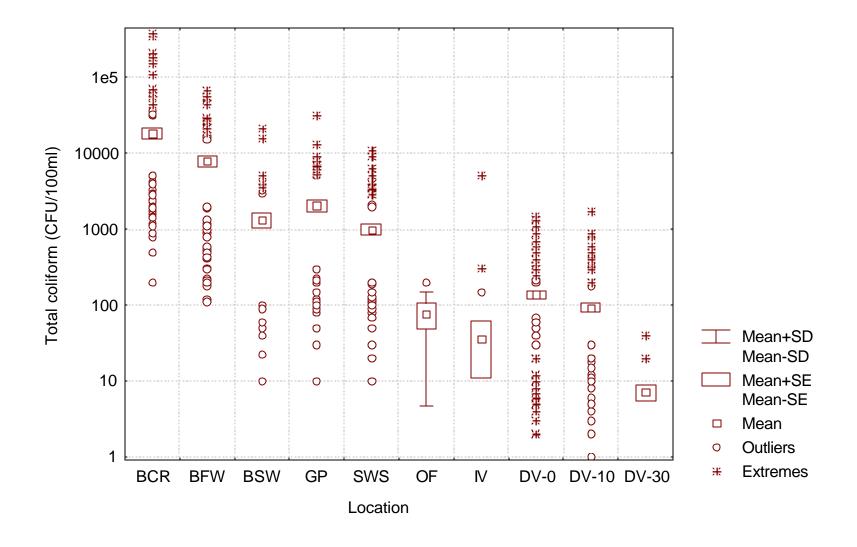


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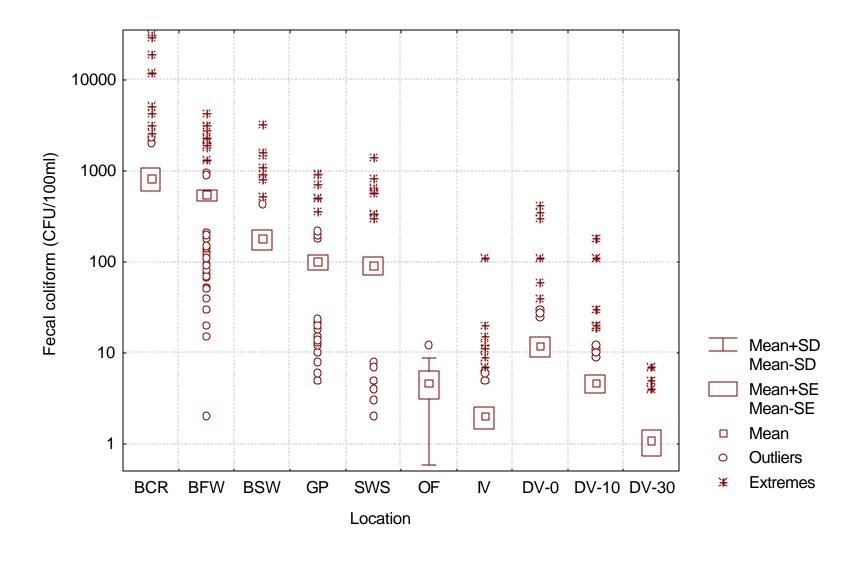


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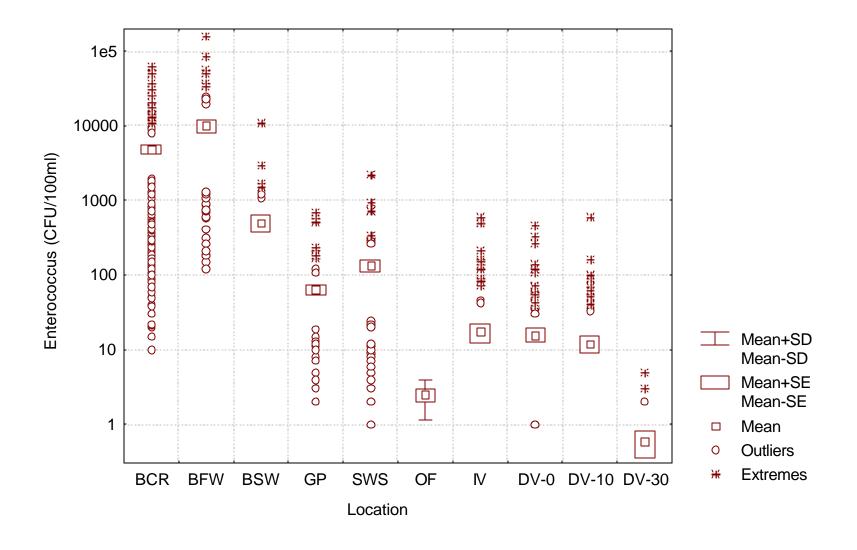
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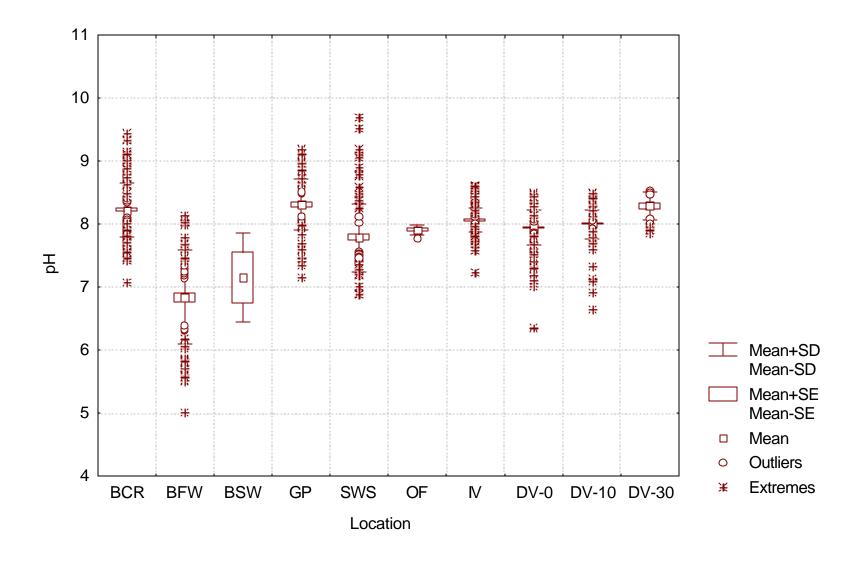
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| KOMEX PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMER HAS ENTERED INTO A CONTRACT. | Title: | Box Plot Analyses of Total Coliform By Location | | 4-12 |



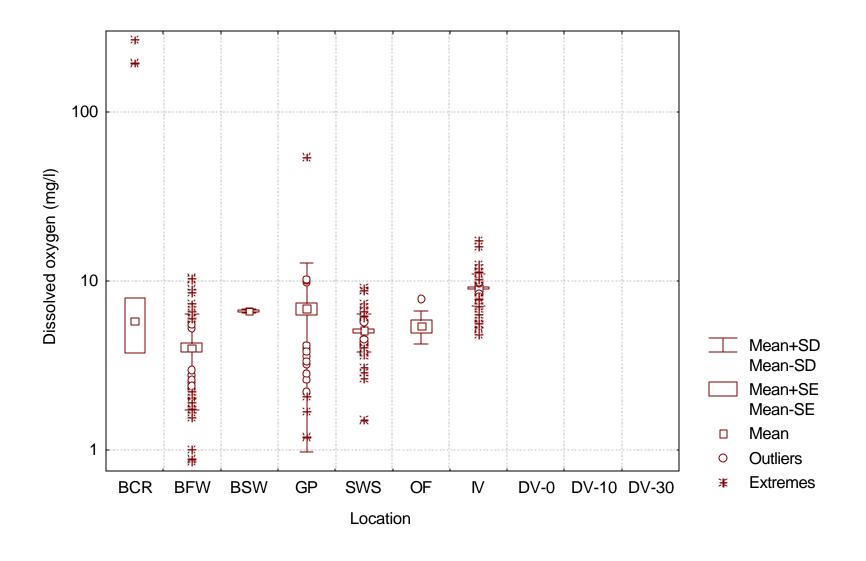
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| PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KORKEY AND STUTENED THAT CONTRACT. | Title: | Box Plot Analyses of Fecal Coliform By Location | | 4-13 |



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| KOMEX PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOME: HAS ENTERED INTO A CONTRACT. | Title: | Box Plot Analyses of Enterococcus By Location | | 4-14 |



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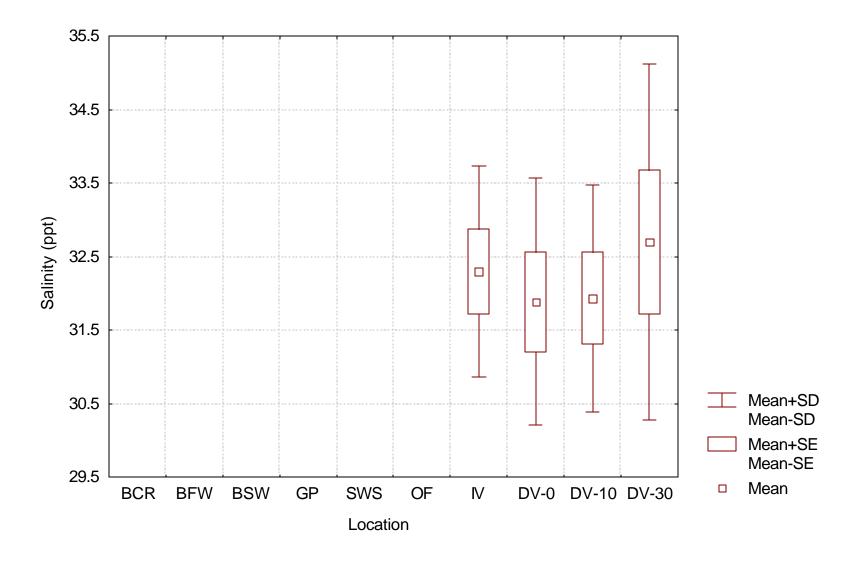


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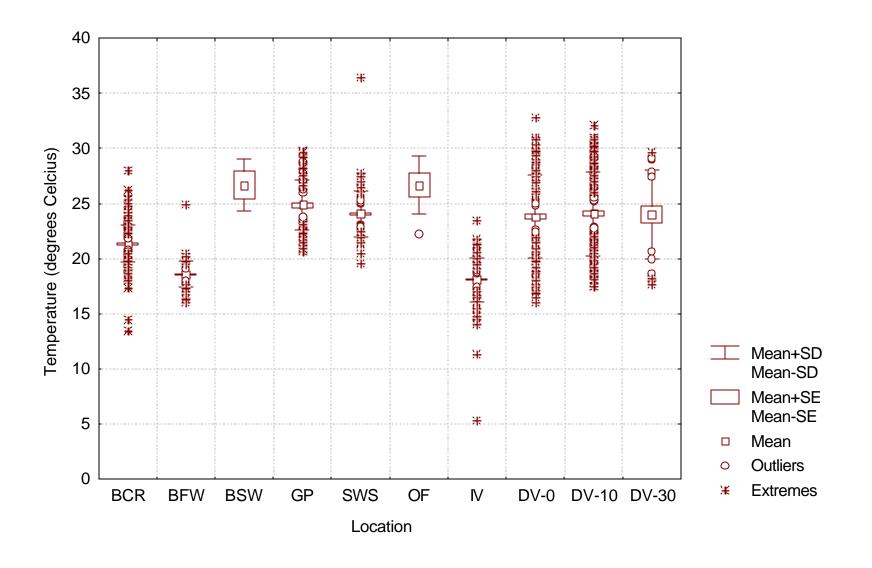
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| KOMEX | Title: | Box Plot Analyses of Dissolved Oxygen By Location | 1 |
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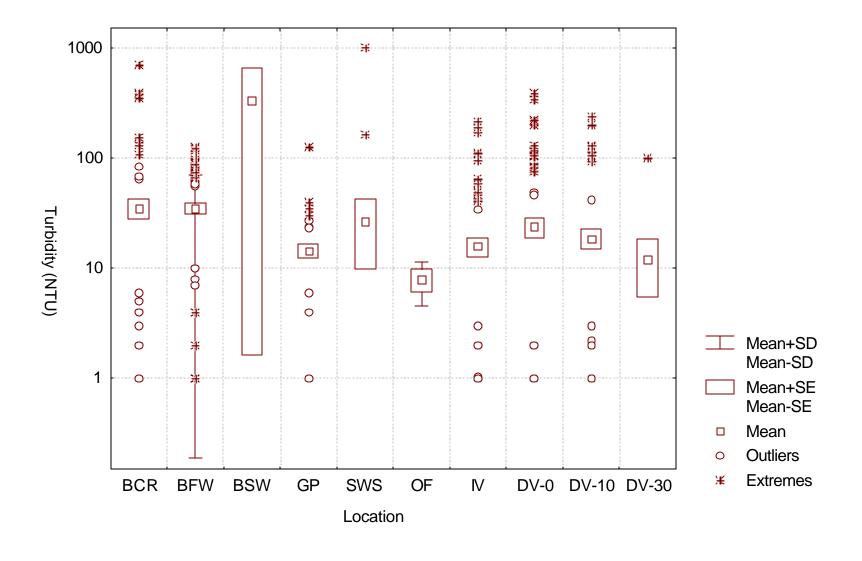


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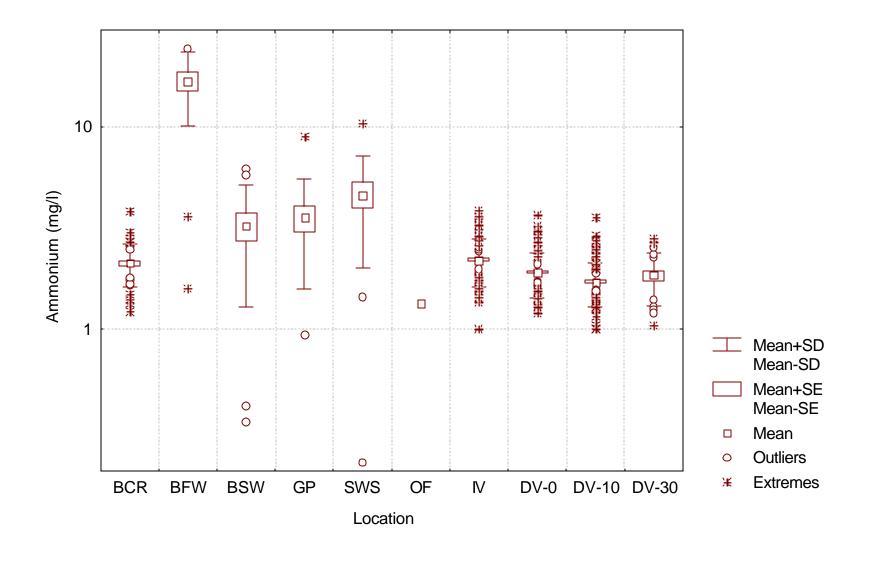
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| ī | Title: | Box Plot Analyses of Lab Measured Salinity By Location | | 4-17 |



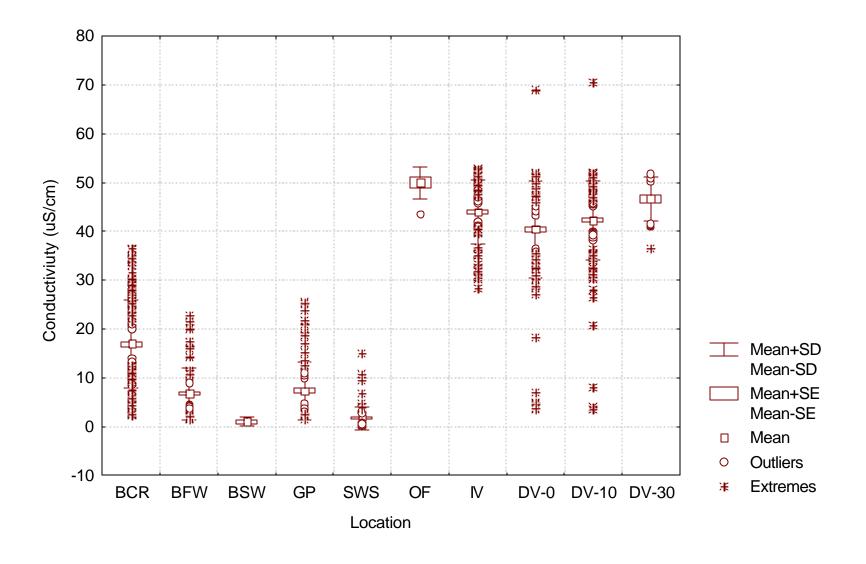
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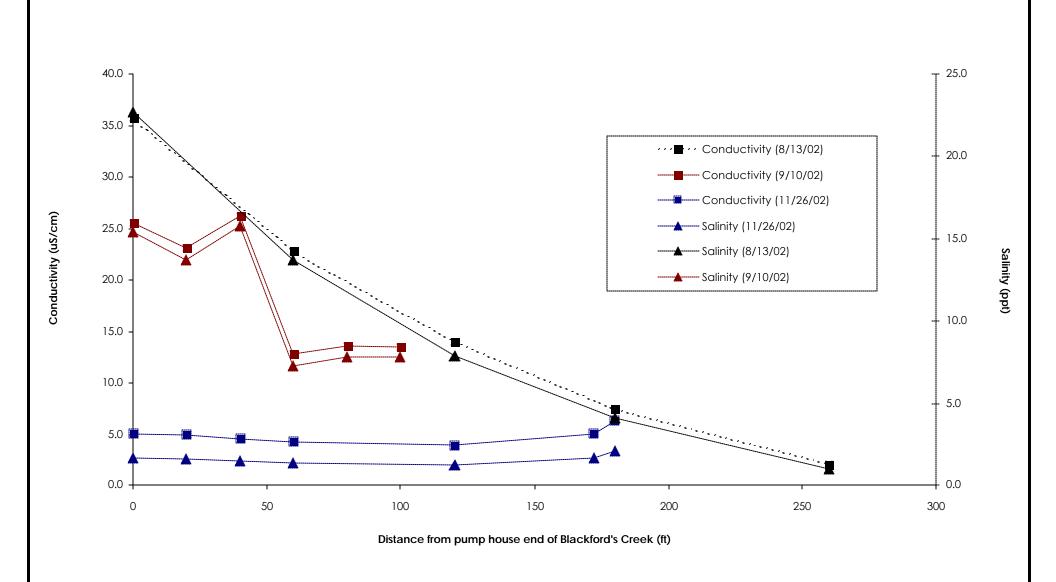
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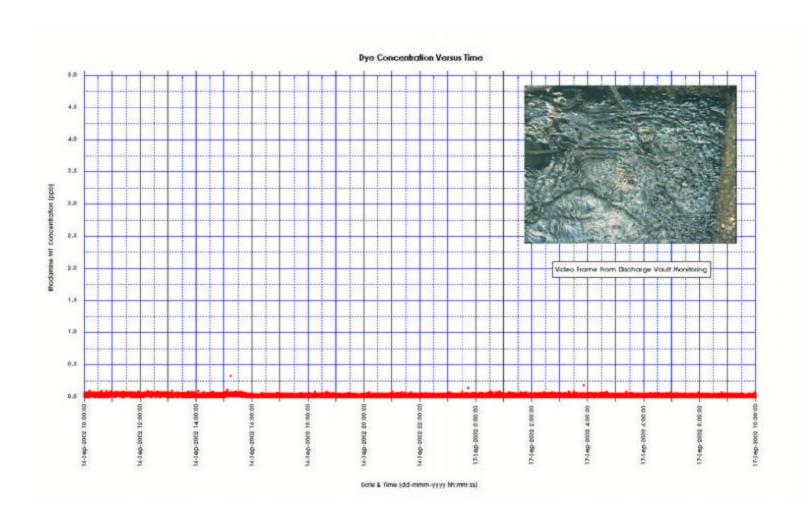
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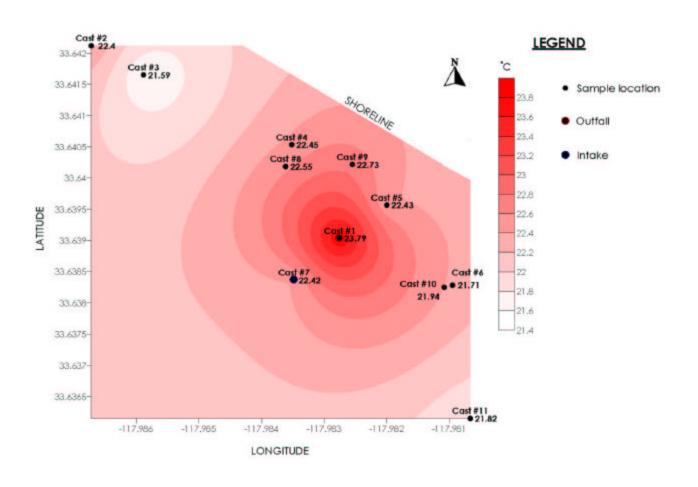
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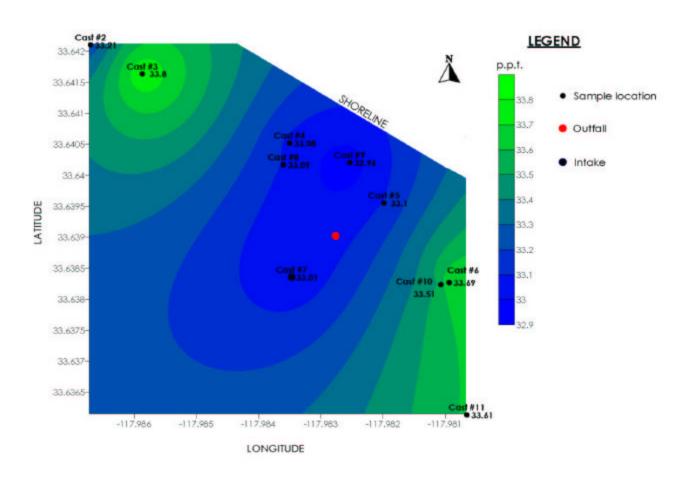


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| KOMEX PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMES HAS ENTERED INTO A CONTRACT. | Title: | Time Series Plot of Sanitary Sewer Dye Test | | 4-23 |





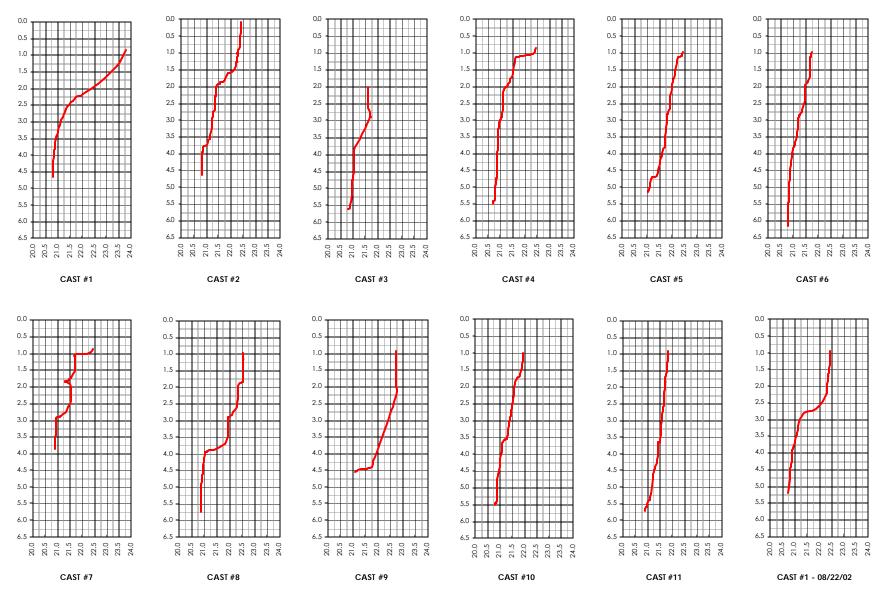
| Title: | Horizontal Temperature Surface Gradient at the Outfall and Cast Locations | | 4-24 |
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| Project/Site: | HBGS - AES Powerplant | Plate No: | |
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| Title: | Horizontal Salinity Surface Gradient at the Outfall and Cast Locations | | 4-25 |
|---------------|--|-----------|------------|
| Project/Site: | HBGS - AES Powerplant | Plate No: | |
| | California Energy Commission | | 225-001 |
| Client: | Outford Face Outside | Date: | April 2003 |

OFFSHORE DYE STUDY - TUESDAY, AUGUST 20, 2002 - CTD CAST RESULTS - TEMPERATURE



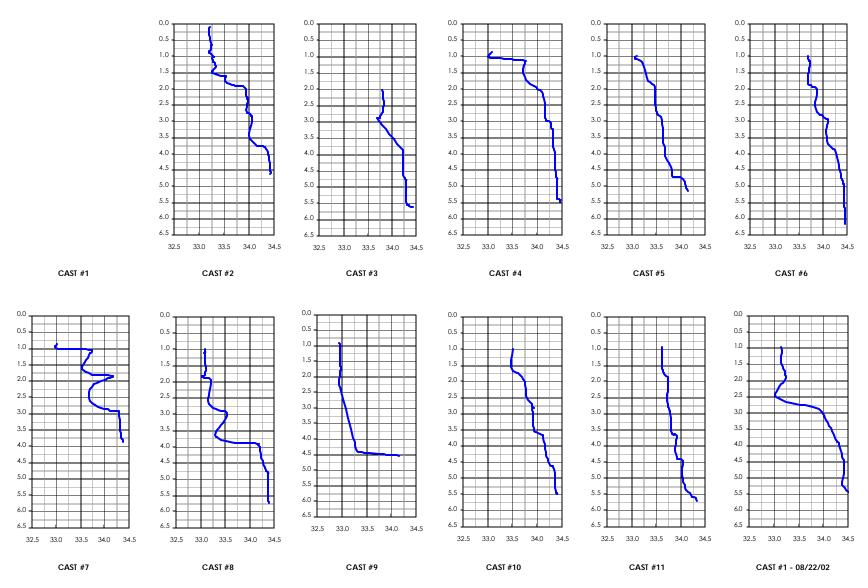
Depths (shown along the vertical axis in each graph) are in meters.

Temperatures (shown along the horizontal axis in each graph) are in degrees Centigrade



| Title: | CTD Cast Results-Temperature | | 4-26 |
|---------------|------------------------------|-------------|------------|
| Project/Site: | HBGS - AES Powerplant | Plate No: | |
| | California Energy Commission | Project No: | 225-001 |
| Client: | California Energy Commission | Date: | April 2003 |

OFFSHORE DYE STUDY - TUESDAY, AUGUST 20, 2002 - CTD CAST RESULTS - SALINITY

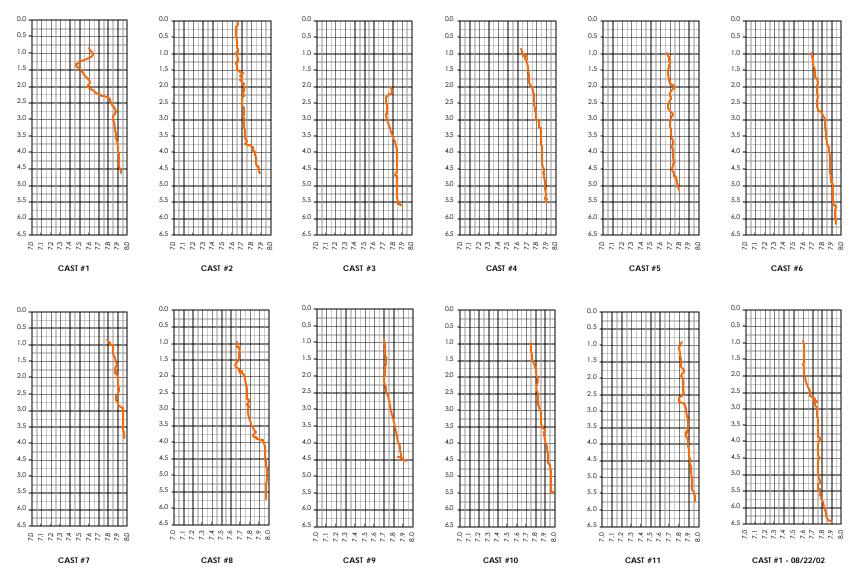


Depths (shown along the vertical axis in each graph) are in meters. Salinities (shown along the horizontal axis in each graph) are in p.p.t.



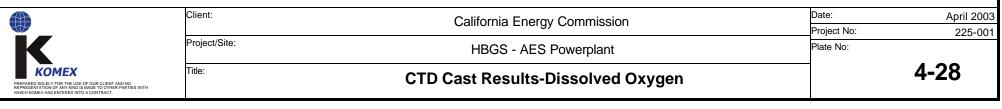
| Title: | CTD Cast Results-Salinity | | 4-27 |
|---------------|------------------------------|-------------|------------|
| Project/Site: | HBGS - AES Powerplant | Plate No: | |
| | California Energy Commission | Project No: | 225-001 |
| Client: | California Energy Commission | Date: | April 2003 |

OFFSHORE DYE STUDY - TUESDAY, AUGUST 20, 2002 - CTD CAST RESULTS - DISSOLVED OXYGEN

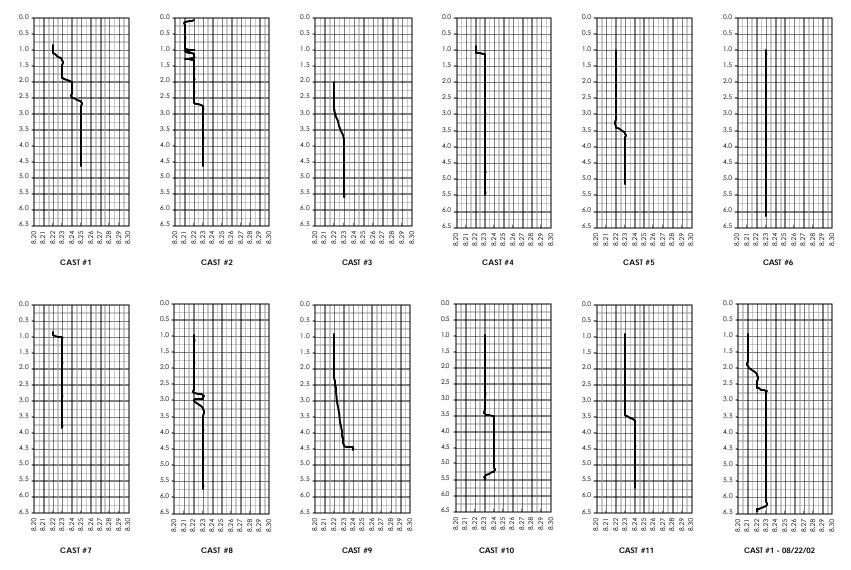


Depths (shown along the vertical axis in each graph) are in meters.

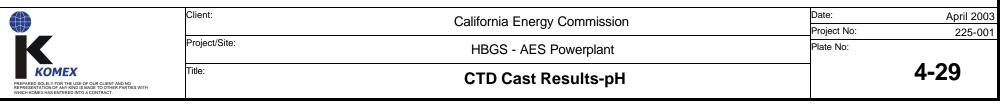
Dissolved Oxygen concentrations (shown along the horizontal axis in each graph) are in mg/L.

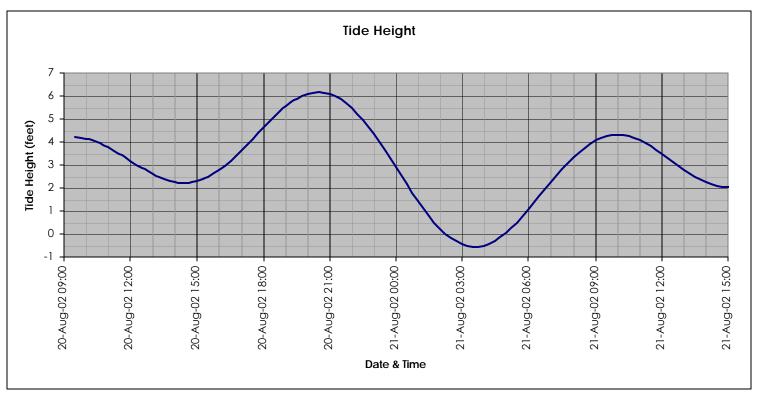


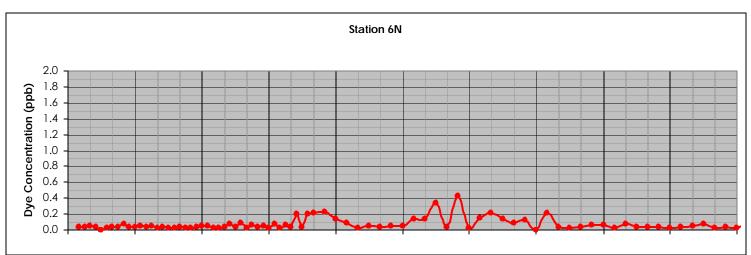
OFFSHORE DYE STUDY - TUESDAY, AUGUST 20, 2002 - CTD CAST RESULTS - pH

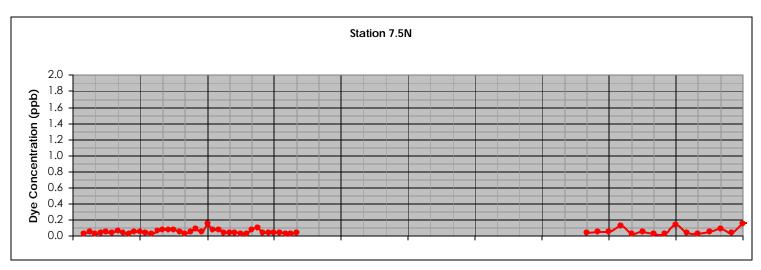


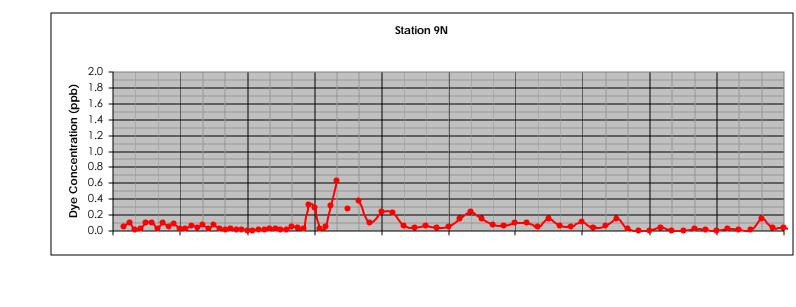
Depths (shown along the vertical axis in each graph) are in meters. pH (shown along the horizontal axis in each graph) is in pH units.



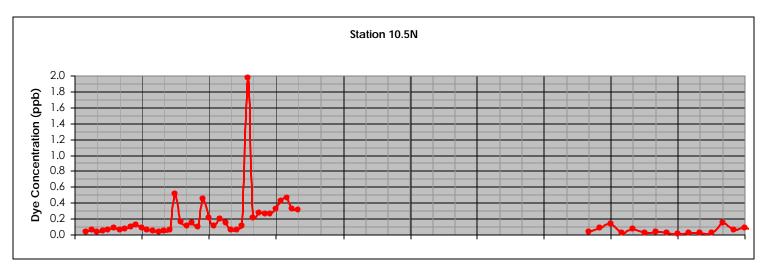


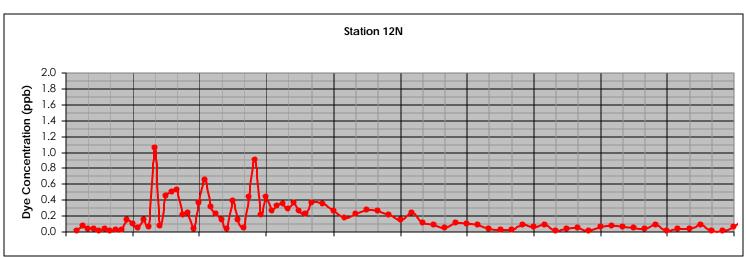


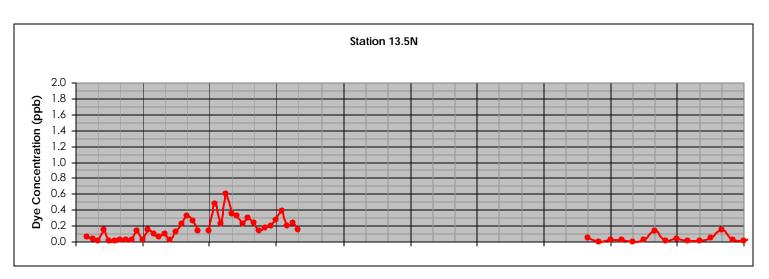


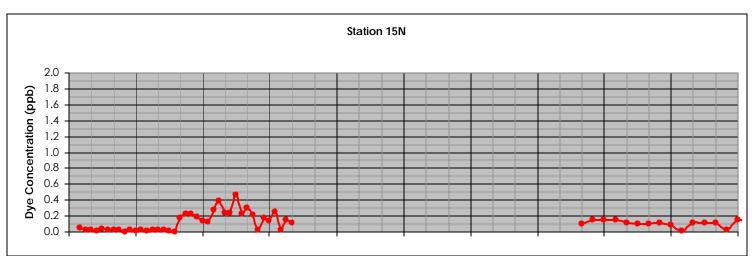


| Title: | Shoreline Rhodamine WT Concentrations between 6N and 9N | | 4-30a |
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| Project/S | HBGS - AES Powerplant | Plate No: | 4.00 |
| | | Project No: | 225-001 |
| Client: | lient: California Energy Commission | Date: | April 2003 |









| Title: | Shoreline Rhodamine WT Concentrations between 10.5N and 15N | | 4-30b |
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| Project/Site: | HBGS - AES Powerplant | Plate No: | |
| Camornia Energy Commission | | Project No: | 225-001 |
| Client: | California Energy Commission | | April 2003 |

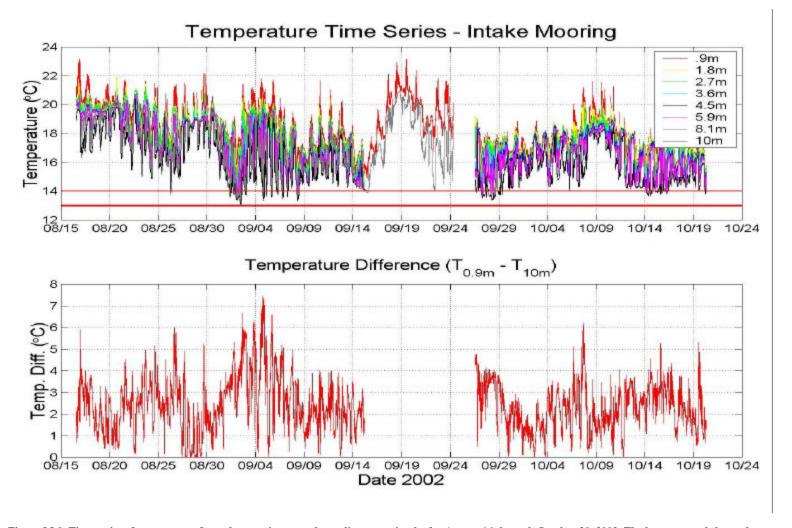
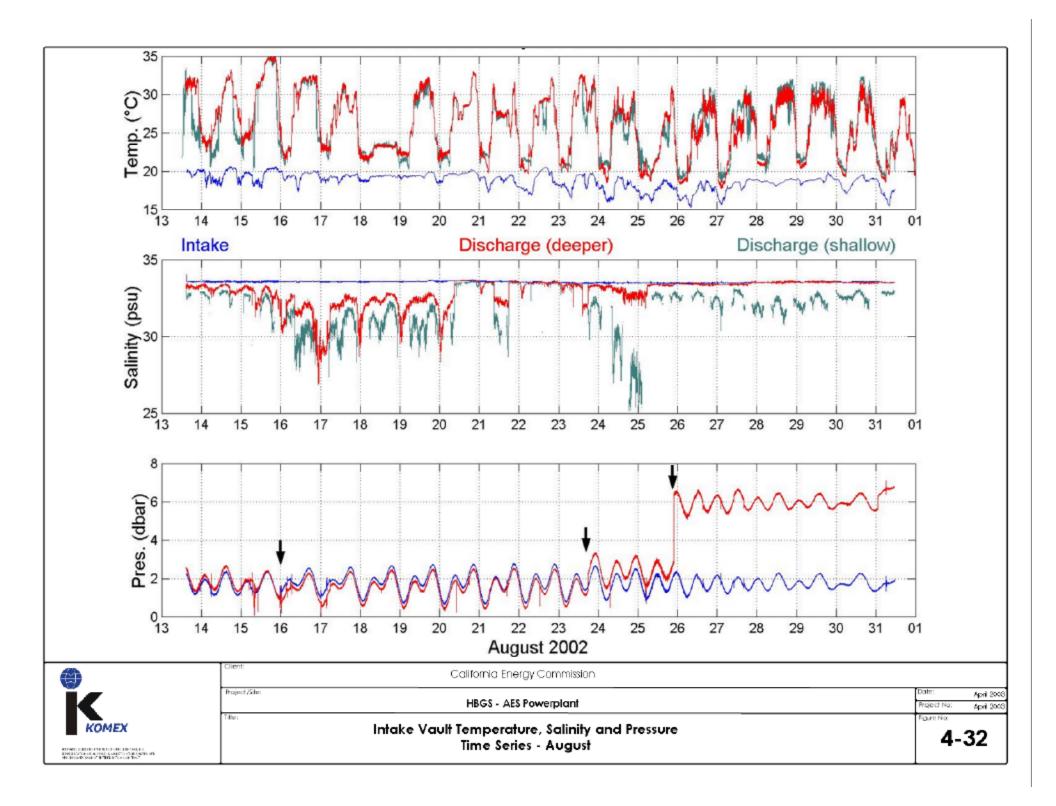
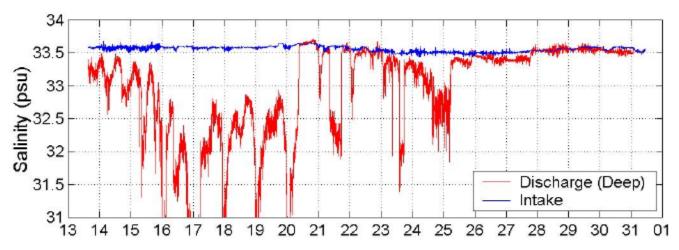


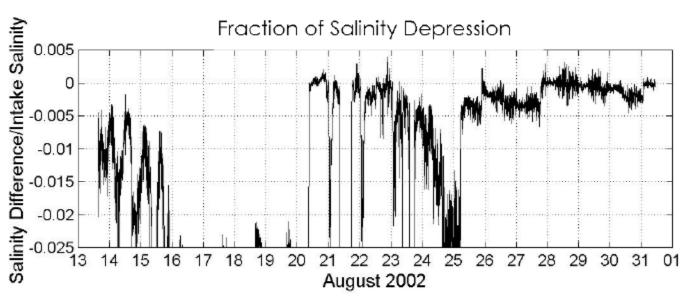
Figure M-0. Time series of temperature from the mooring near the cooling water intake for August 16 through October 20, 2002. The bottom panel shows the temperature difference between the nearsurface temperature at 0.9 meters and the nearbottom temperature at 10 meters. In the top panel, the horizontal red lines are at 13 and 14 degrees.

| | Client: | California Energy Commission | Date: | April 2003 |
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| | | Camorna Energy Commission | Project No: | 225-001 |
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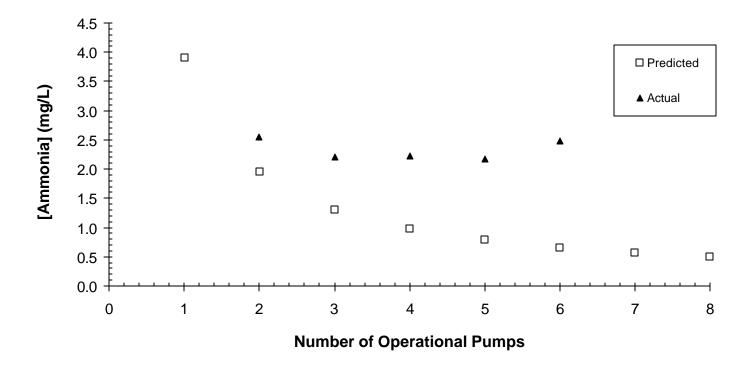




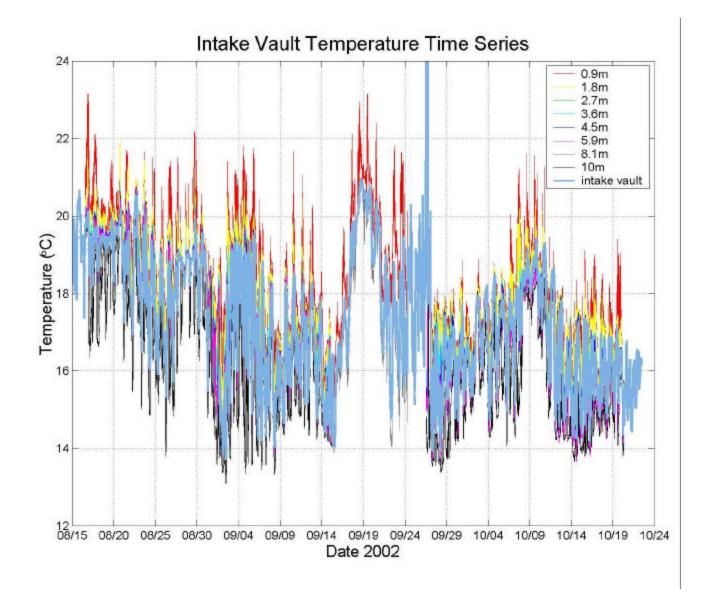




| Title: | Salinity During the First Deployment and the Fraction of Salinity Depression | 4-33 |
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| Project/Site: | HBGS - AES Powerplant | |
| Client: | California Energy Commission | |

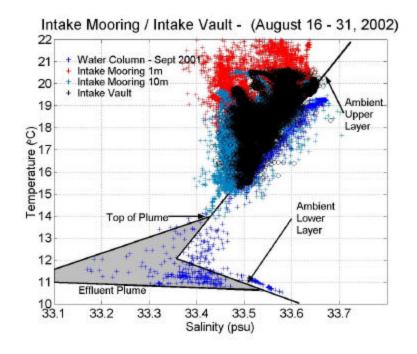


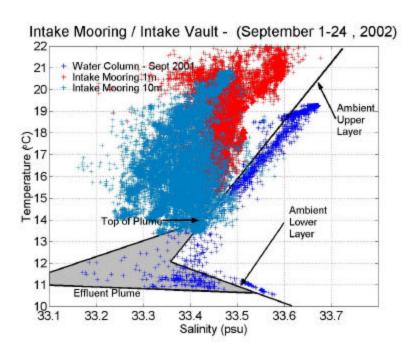
| | Client: | California Energy Commission | | April 2003 |
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| Title: | Intake Vault and Intake Mooring Temperature Time Series | | 5-2 |
|---------------|---|-------------|------------|
| Project/Site: | HBGS - AES Powerplant | Plate No: | |
| | California Energy Commission | Project No: | 225-001 |
| Client: | California Energy Commission | Date: | April 2003 |



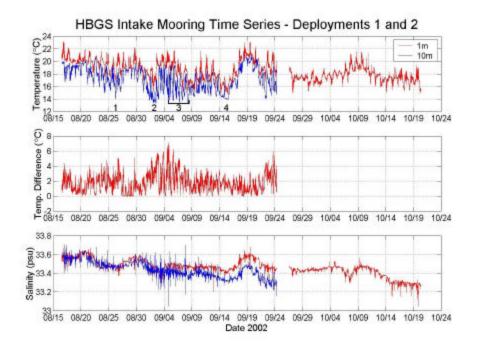


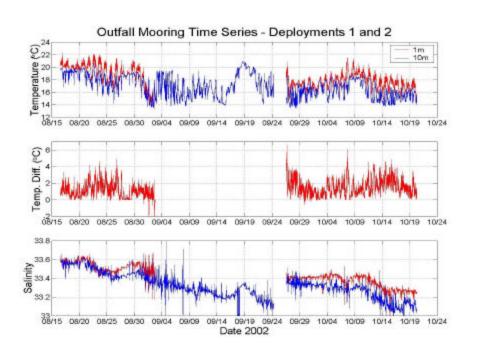
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| Project/Site: | HBGS - AES Powerplant | F |
| itle: | Intake Vault Temperature - Salinity Distribution August an September | |

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5-3

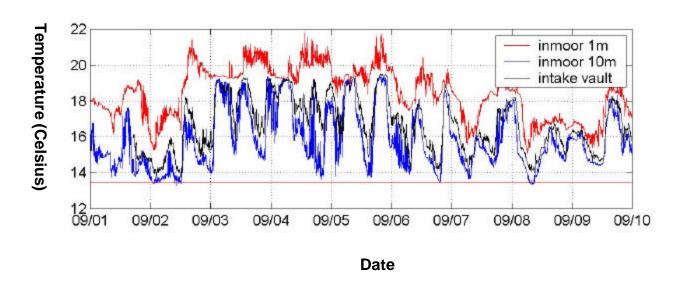




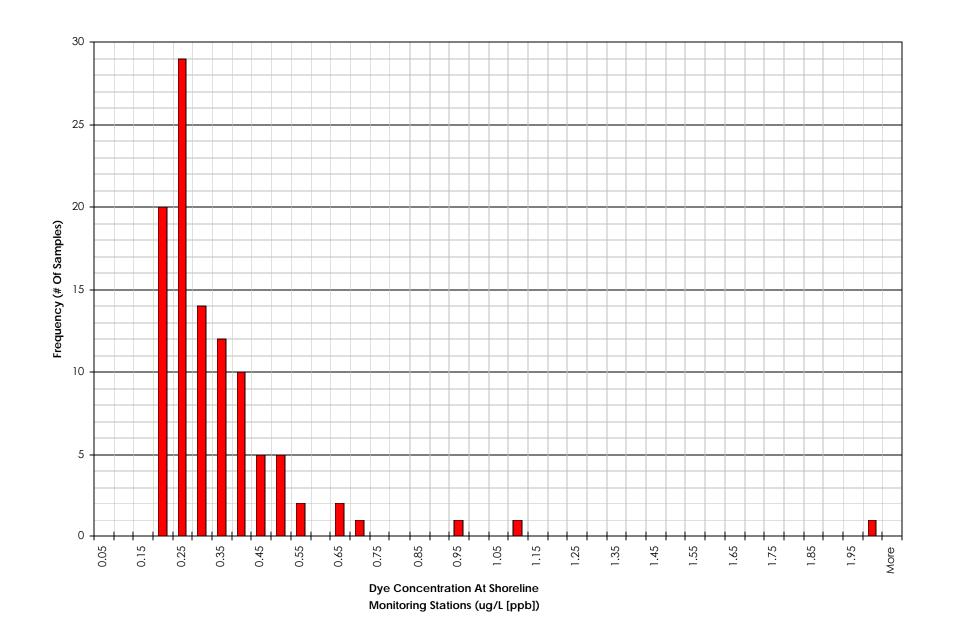
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| Client: | California Energy Commission | D P |
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| Title: | Time Series of Temperature, Temperature Difference a Salinity for Intake and Outfall Moorings | n |

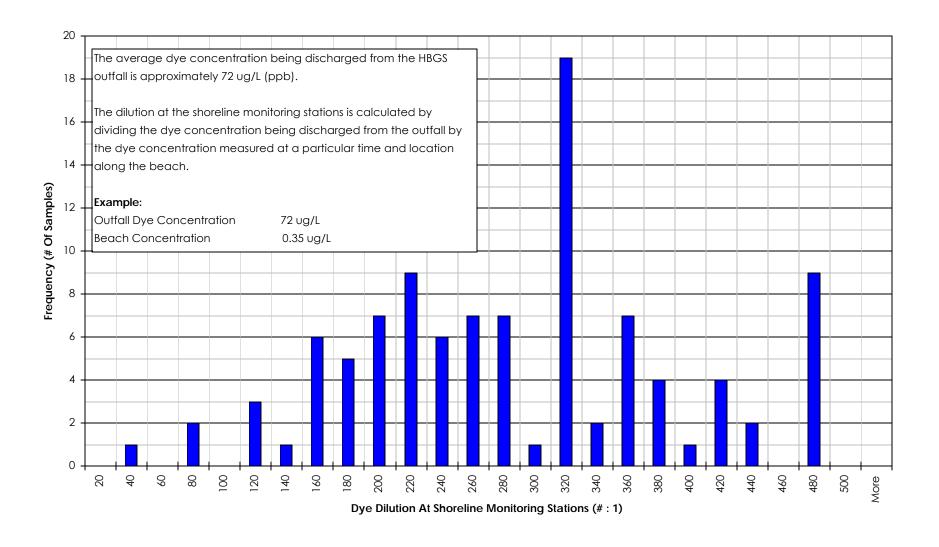
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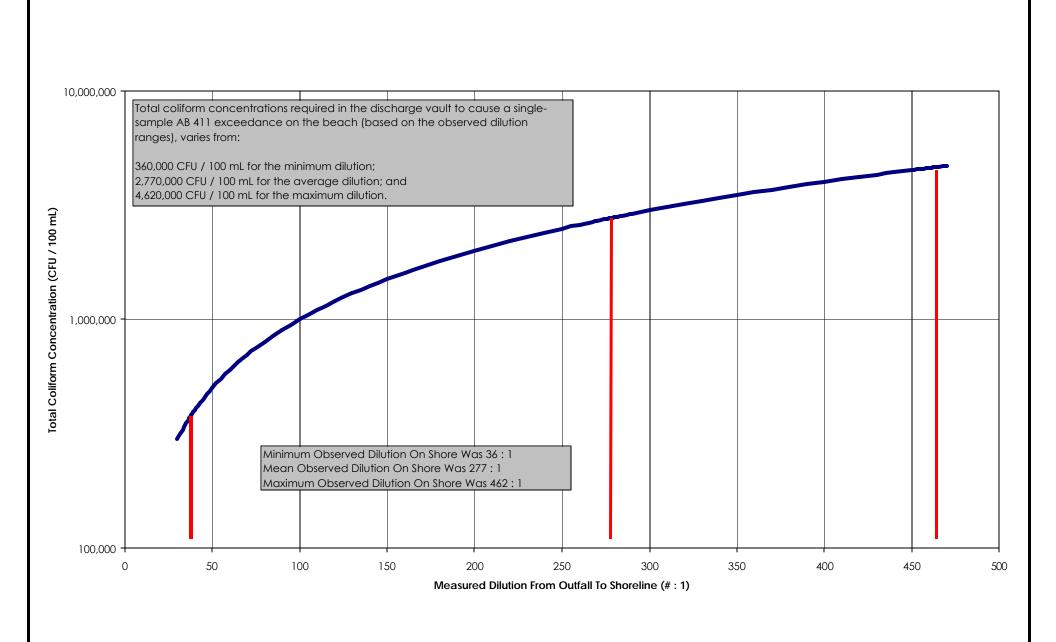
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| _ | | Camorna Energy Commission | Project No: | 225-001 |
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| RED SOLELY FOR THE USE OF OUR CLIENT AND NO SERVIATION OF ANY KIND IS MADE TO OTHER PRAFILES WITH KOMEX HAS EMPRED INTO A CONTRACT. | Title: | Intake Vault and Intake Mooring-September | | 5-5 |



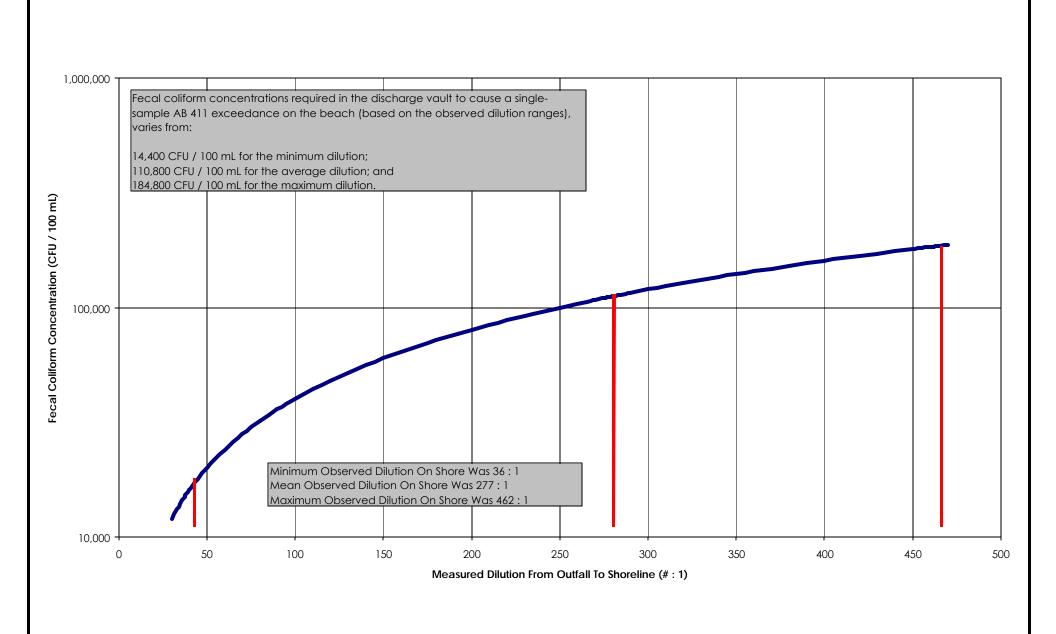
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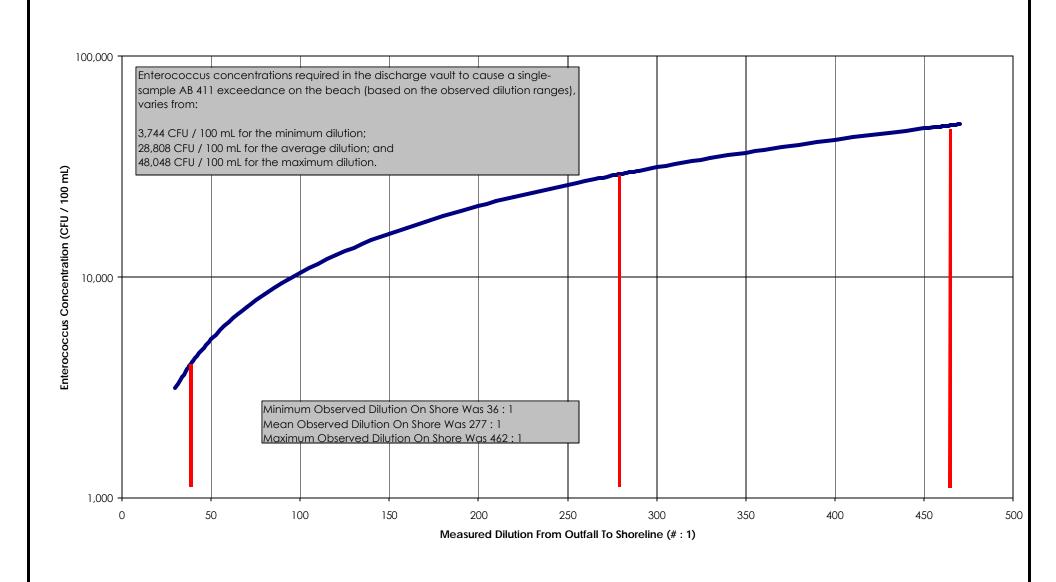
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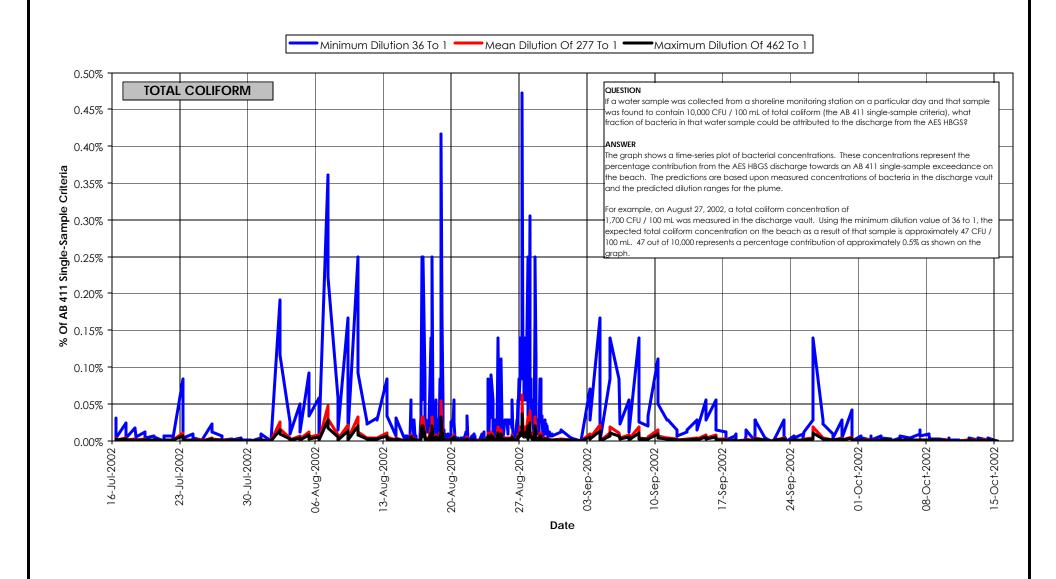
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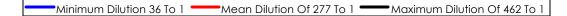
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| FREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KONDERVINES WERE THE SOLET. | Title: | Fecal Coliform Discharge Exceedance Modeling | | 5-9 |

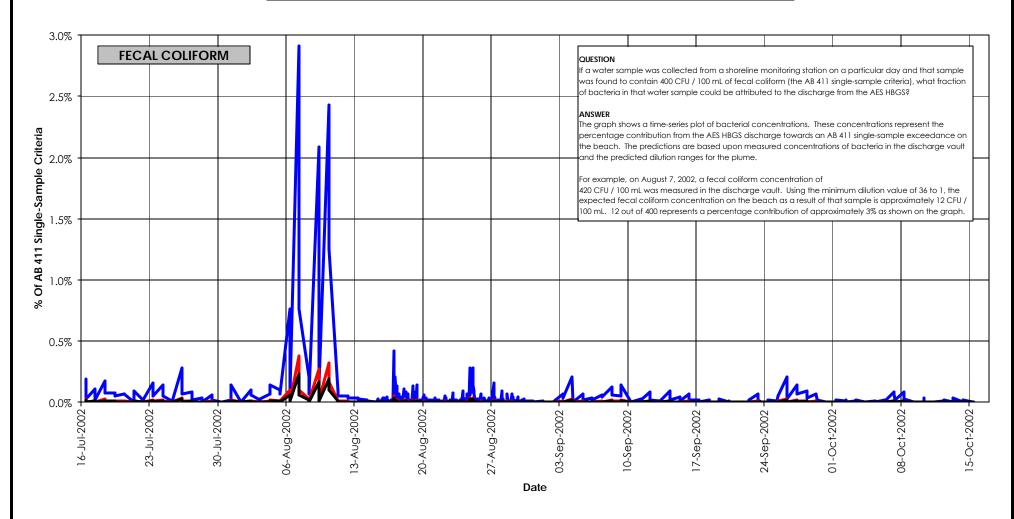


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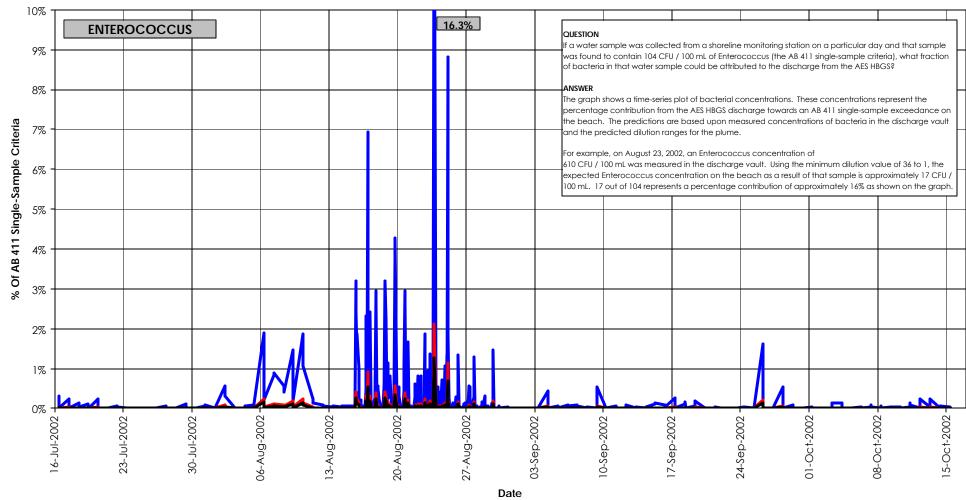


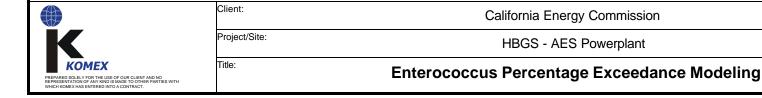
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| PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH | Title: | Fecal Coliform Percentage Exceedance Modeling |
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5-12

Minimum Dilution 36 To 1 Mean Dilution Of 277 To 1 Maximum Dilution Of 462 To 1

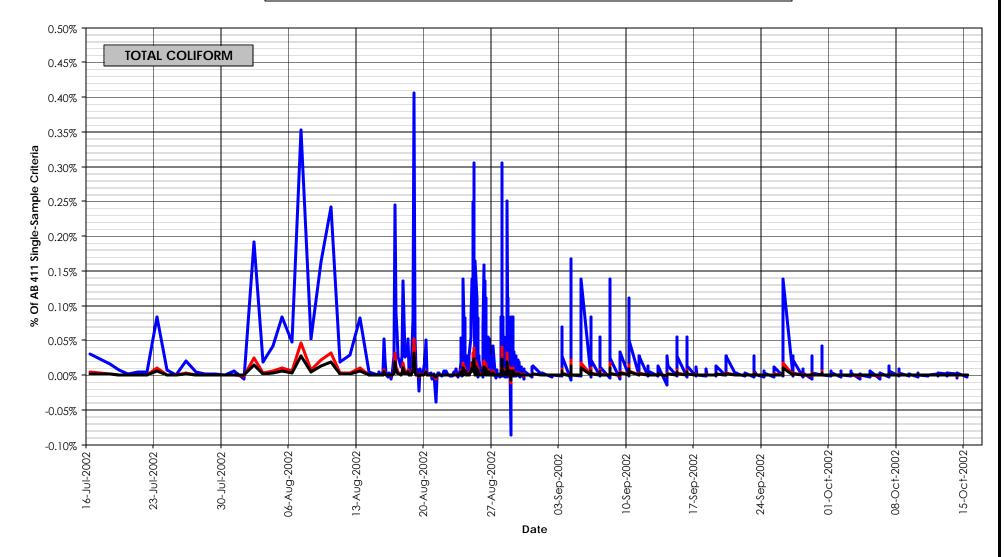




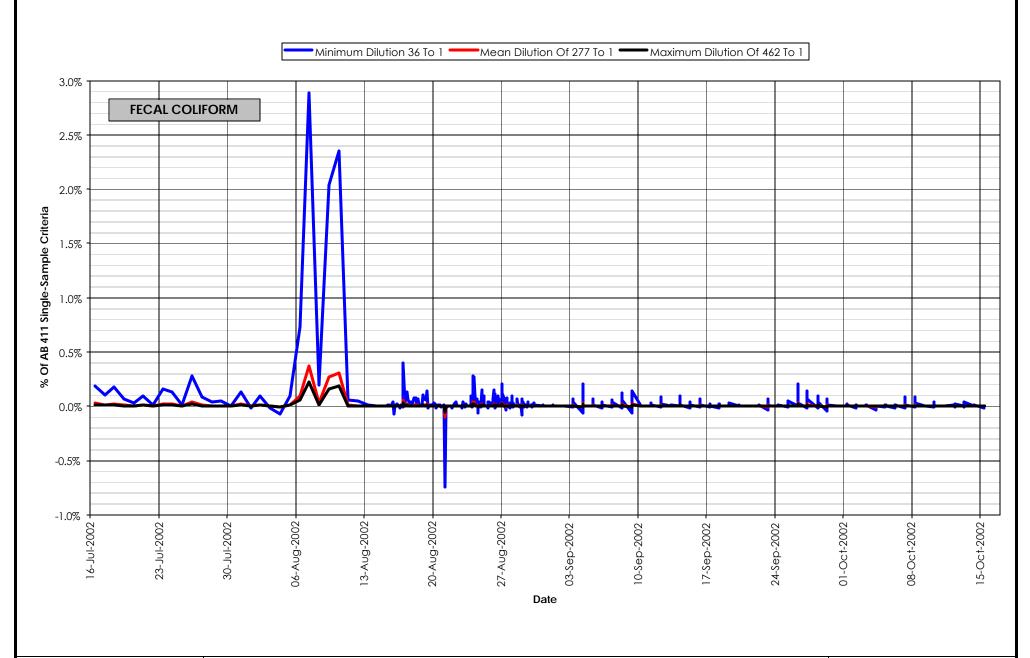
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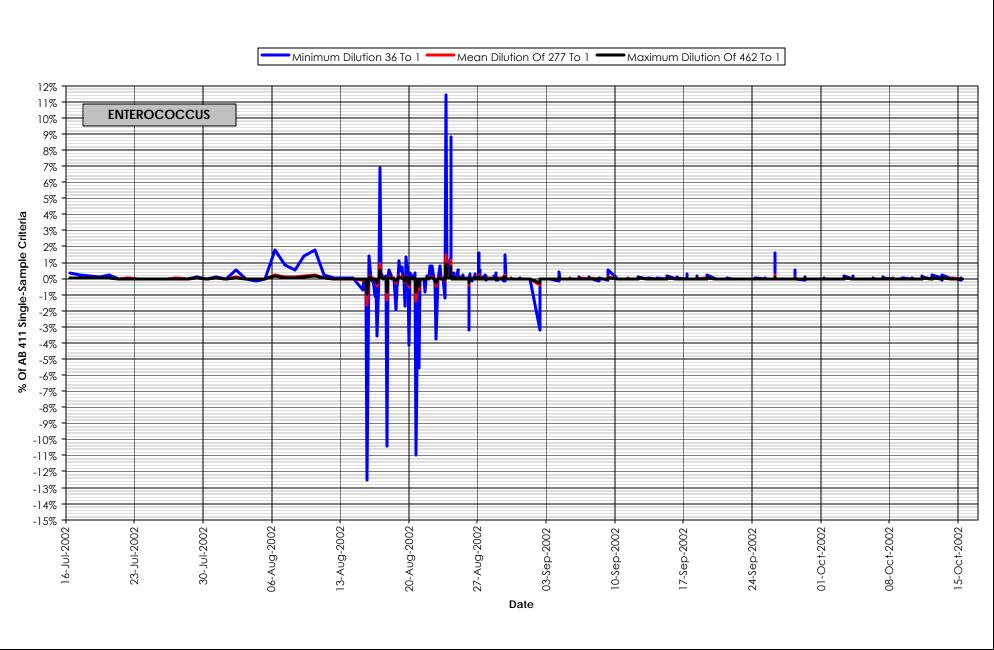




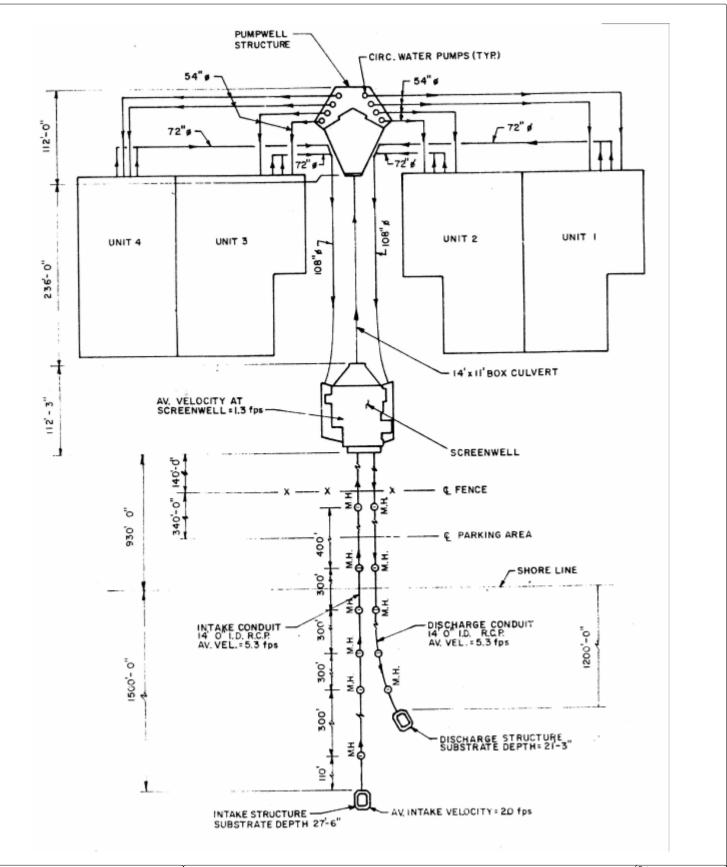
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| REPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMBET HAS ENTERED WITHOUT CONTRACT. | Title: | Net Flux of Total Coliform - Predicted Contribution to Beach Exceedance | | 5-14 |



| | Project/Site: | HBGS - AES Powerplant | Project No: Plate No: | 5-15 |
|--|---------------|---|--------------------------|------|
| PREPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KOMEX HAS ENTERED INTO A CONTRACT. | | Net Flux of Fecal Coliform - Predicted Contribution to Beach Exceedance | | 3-13 |

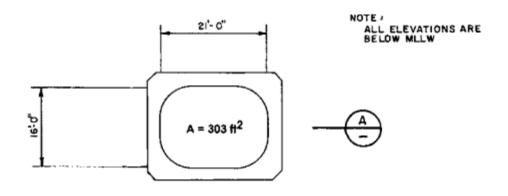


| | Client: | California Energy Commission | Date: | April 2003 |
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| | | Camornia Energy Commission | Project No: | 225-001 |
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| REPARED SOLELY FOR THE USE OF OUR CLIENT AND NO REPRESENTATION OF ANY KIND IS MADE TO OTHER PARTIES WITH WHICH KNOWEY HAVE ENTERED INTO A CONTRACT. | Title: | Net Flux of Enterococcus - Predicted Contribution to Beach Exceedance | | 5-16 |

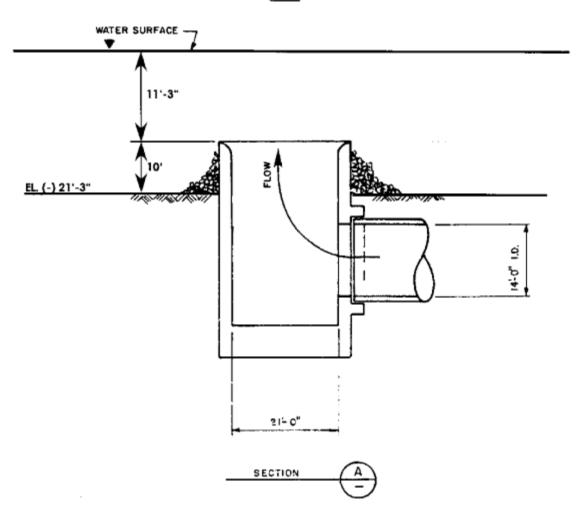




| | Client: | California Energy Commission | Date: | April 2003 |
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| | Project/Site: | HBGS - AES Powerplant | Project No: | 225-001 |
| ľ | Title: | | Figure No: | |
| | | AES HBGS Facilites Schematic | A | \-1 |

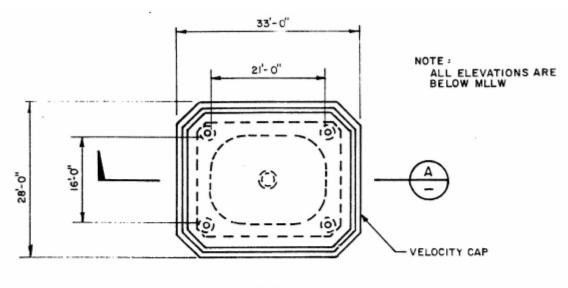




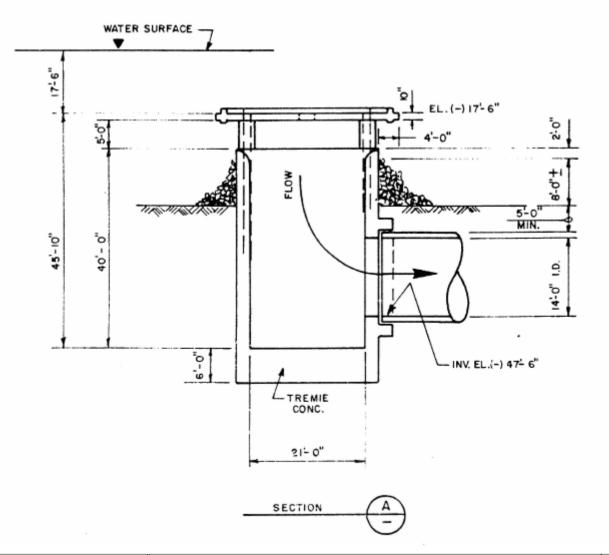


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| | Project/Site: | HBGS - AES Powerplant | Project No: 225-001 |
| Ī | Title: | | Figure No: |
| | | AES Outfall Terminus Detail | A-2 |

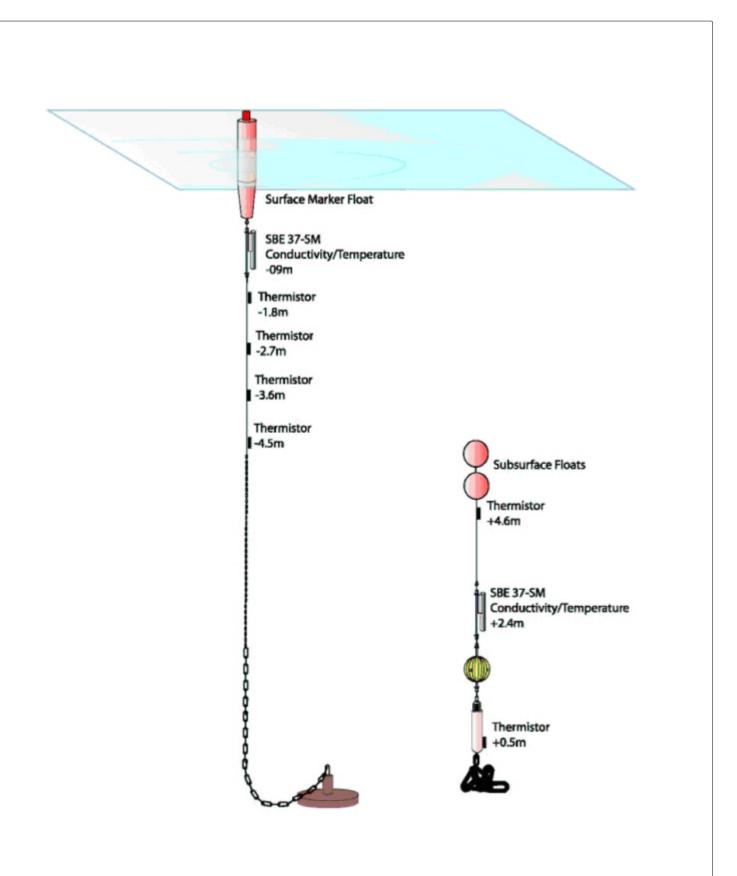


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| | Project/Site: HBGS - AES Powerplant | Project No: 225-001 |
| ſ | Title: | Figure No: |
| | AES Intake Detail | A-3 |





| California Energy Commission | Date: April 2003 |
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| Project/Site: HBGS - AES Powerplant | Project No: 225-001 |
| Title: | Figure No: |
| Mooring Array Figure | A-4 |